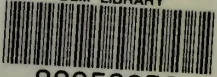


BLM LIBRARY



88050053

U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management

Final



Vale District Office

September 1983

# Southern Malheur Grazing Management Program

## Environmental Impact Statement

SF  
85.35  
.07  
U551







1088050053

SF  
85,35  
.07  
4551



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Enclosed for your review and comment is the Southern Malheur Grazing Management Final Environmental Impact Statement (EIS). The statement analyzes the impacts that would result from five alternative livestock management programs. The purpose of the statement is to present environmental, technical, economic and social information for use in the decisionmaking process.

The final EIS consists only of the comments and responses to the draft EIS, and a listing of necessary text changes. Some of these text changes are the result of revising portions of the Preferred Alternative which relate to riparian areas. Therefore, this final EIS must be used in conjunction with the earlier draft statement which was distributed to the public in May 1983.

This environmental impact statement is not the decision document. If you wish to comment for the District Manager's consideration in development of the decision, please submit your comments to the District Manager by the end of October 1983. Your comments should be sent to:

District Manager  
P.O. Box 700  
100 East Oregon Street  
Vale, Oregon 97918

The Management Framework Plan decisions on the action to be taken will be based on the analysis contained in the EIS, any additional data available, public opinion, management feasibility, policy and legal constraints. The Rangeland Program Summary (which includes the final decisions) will be released in early 1984.

Thank you for your interest in this environmental impact statement.

Sincerely yours,

*Frederic M. Parker*

District Manager

BLM LIBRARY  
RS 150A BLDG. 50  
DENVER FEDERAL CENTER  
P.O. BOX 25047  
DENVER, CO 80225





Final

# Environmental Impact Statement

## Southern Malheur Grazing Management Program

Prepared by  
**U.S. DEPARTMENT OF THE INTERIOR**  
**Bureau of Land Management**  
1983

*William L. Zeavell*

State Director, Oregon State Office



# Southern Malheur Proposed Grazing Management

## Draft ( ) Final (x) Environmental Impact Statement Department of the Interior, Bureau of Land Management

### • Type of Action: Administrative (x) Legislative ( )

• **Abstract:** The Bureau of Land Management proposes to implement livestock grazing management on approximately 4 million acres (53 allotments) of public land in eastern Oregon. Unallotted status would continue on approximately 64,000 acres. Implementation of the proposed alternatives includes allocation of forage to livestock; wild horses, wildlife and nonconsumptive uses; establishment of grazing systems; and construction of range improvements.

Range condition would improve under all alternatives analyzed. Water quality would improve under Alternatives 3, 4 and 5. Antelope populations are expected to increase under Alternatives 2 and 3. Long term increases in personal income, employment, and ranch valuation would occur under all alternatives.

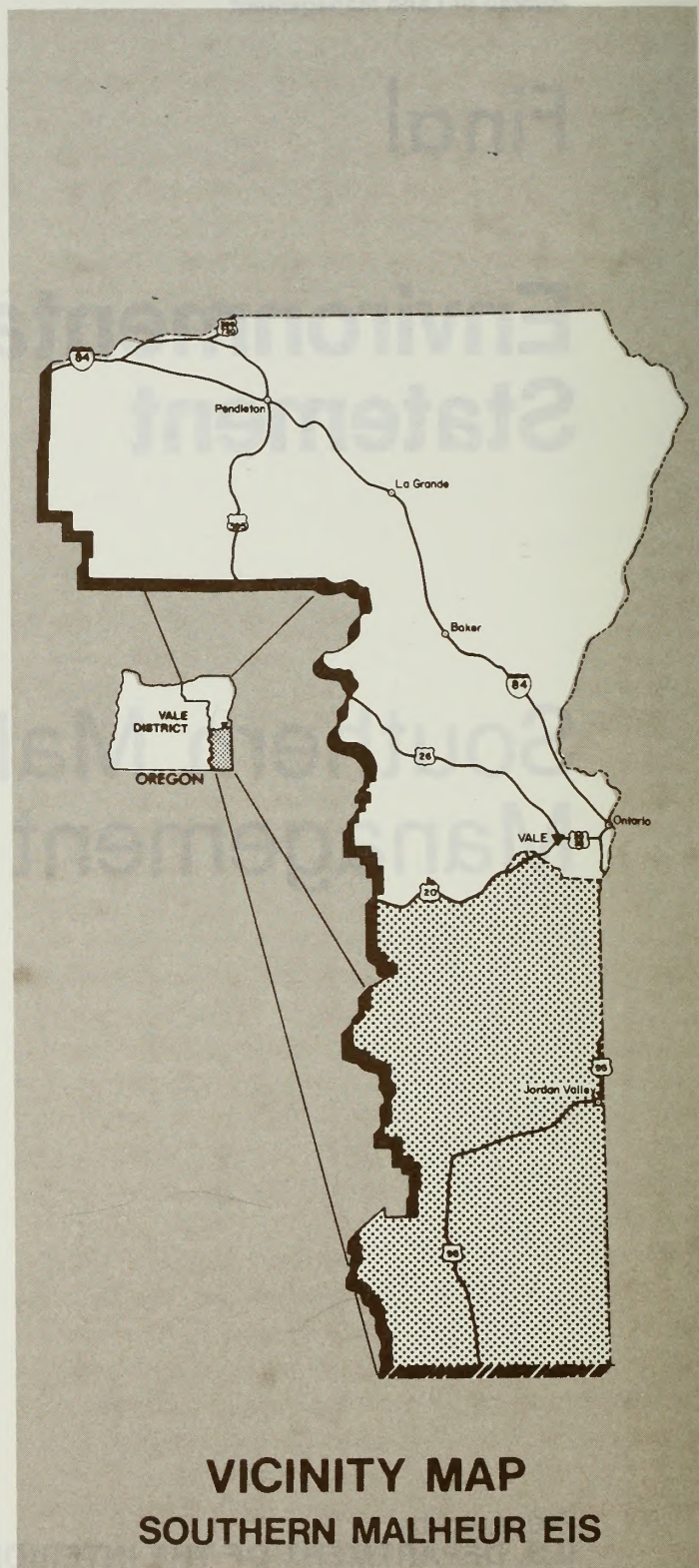
### • Alternatives analyzed:

- No Action
- Emphasize Livestock Grazing
- Preferred Alternative
- Emphasize Non-Livestock Values
- Emphasize Wild Horses

Draft statement was made available to EPA and the public late April 1983.

### For further information contact:

Bureau of Land Management  
Vale District Office  
P.O. Box 700 (100 E. Oregon St.)  
Vale, Oregon 97918  
Telephone: (503) 473-3144





# Table of Contents

	Page
Summary .....	1
Revision of the Preferred Alternative .....	4
Consultation and Coordination .....	4
Response to Comments .....	4
Text Changes .....	37

## Summary

This environmental impact statement (EIS) analyzes the impacts of implementing a forest & grazing management program in the Southern Harney EIS area of the Vale District in eastern Oregon. The alternatives discussed through the Bureau planning system are discussed and analyzed. The purpose of the proposed alternative is to carry out and evaluate options for managing, conserving and restoring landscape resources.

The EIS alternative is a summary of the proposed management plan for the Southern Harney EIS area.

4. Alternative 1, the Author: Alternative 1 involves the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area.

4. Alternative 2, the Author: Alternative 2 involves the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area.

Under these conditions, the EIS area is a summary of the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area.

4. Alternative 3, the Author: Alternative 3 involves the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area. The proposed management plan for the Southern Harney EIS area is a summary of the proposed management plan for the Southern Harney EIS area.







# Summary

## Summary

This environmental impact statement (EIS) analyzes the impacts of implementing a livestock grazing management program in the Southern Malheur EIS area of the Vale District in eastern Oregon. Five alternatives developed through the Bureau planning system are described and analyzed. The purpose of the proposed alternatives is to present and evaluate options for managing, protecting and enhancing rangeland resources.

The five alternatives and a summary of environmental consequences are described below:

- **Alternative 1, No Action** - Alternative 1 continues the present situation. Grazing permits would continue to be issued at the 1981 active preference level of 320,346 AUMs. In addition, use by wildlife (5,296 AUMs) and wild horses (16,380 AUMs) would occur. Grazing management would be the same as at present. No additional range improvements would be constructed.
- **Alternative 2, Emphasize Livestock Grazing** - Alternative 2 would provide maximum forage allocations to livestock by allowing utilization levels of 60 percent on native range and 65 percent on

seeded range. Under these utilization levels 453,827 AUMs are available for initial allocation to livestock (437,731 AUMs), wildlife (5,296 AUMs) and wild horses (10,800 AUMs). 2,394 AUMs, located primarily in existing exclosures would be allocated to nonconsumptive uses. Livestock grazing would be allowed throughout the area except where currently excluded (8,400 acres). Proposed range improvements include seedings (116,779 acres), brush controls (253,049 acres), fences (238 miles) and water developments (296 developments).

- **Alternative 3, Preferred Alternative** - Grazing systems under Alternative 3 are designed to maintain or improve range and forage conditions to benefit wildlife, wild horses and livestock. Maximum utilization levels of 50 percent on native range and 60 percent on seeded range would be allowed. Under these utilization levels, 429,516 AUMs are available for initial allocation to livestock (411,020 AUMs), wildlife (5,296 AUMs) and wild horses (13,200 AUMs). 32,733 AUMs would be allocated to nonconsumptive uses. Livestock and wild horses would be excluded from 478 acres in addition to the 8,400 acres of existing exclusion. Proposed range improvements include seedings (34,695 acres), brush controls (79,581 acres), fences (123 miles) and water developments (226 developments).



- **Alternative 4, Emphasize Non-Livestock Grazing Values** - Alternative 4 would emphasize non-livestock values where conflicts with livestock grazing have been identified. Maximum allowable utilization would be 40 percent on native range and 50 percent on seeded range. Under these utilization levels, 358,155 AUMs are available for initial allocation to livestock (345,659 AUMs), wildlife (5,296 AUMs) and wild horses (7,200 AUMs). 104,094 AUMs would be allocated to nonconsumptive uses. This alternative would exclude livestock from 74,483 acres in addition to the 8,400 acres of existing exclusion. Proposed range improvements are limited to 188 miles of riparian area protective fences.

- **Alternative 5, Emphasize Wild Horses** - Alternative 5 would emphasize wild horses within the existing wild horse herd areas. This alternative would exclude livestock from thirteen wild horse herd areas (806,901 acres). Maximum allowable utilization would be 40 percent on native range and 50 percent on seeded range. Under these utilization levels, 341,658 AUMs would be available for initial allocation to livestock (292,369 AUMs), wildlife (5,296 AUMs) and wild horses (43,993 AUMs). 120,591 AUMs would be allocated to nonconsumptive uses. Twenty-eight water developments would be constructed in the wild horse herd areas. Grazing systems, allocations and range improvements would be the same as Alternative 4 outside the wild horse herd areas.

## Environmental Consequences

### Vegetation

Range and forage conditions would improve under all alternatives. Total residual ground cover would decrease significantly under all alternatives except Alternative 1. The proportion of residual ground cover composed of perennial vegetation would increase under all alternatives. Alternatives 3, 4 and 5 would result in significant increases in woody key species on streamside riparian areas with medium or high improvement potential. Alternatives 1 and 2 would result in decreases in woody species in these areas. The standard procedures and design elements would prevent impacts to threatened, endangered and sensitive plants from construction of range improvements. The impacts from other aspects of the grazing management program on these plant species are unknown.

### Soils

On uplands, decreases in residual ground cover would be offset to varying degrees by increases in the composition of perennial species, stabilizing or decreasing erosion on 86, 68, 84, 89 and 74 percent of the area under Alternatives 1 through 5 respectively.

Over the long term, approximately 80 percent of the miles of streambank would be stabilized under Alternatives 3, 4 and 5, and 50 percent under Alternatives 1 and 2.

### Water

No change in water quantity would occur under any of the alternatives. Water quality (sediment yield, water temperatures, fecal coliforms) would improve under Alternatives 3, 4 and 5.

### Wildlife

Small mammals, birds and fish that are dependent on riparian areas would increase under Alternatives 3, 4 and 5. Alternatives 1 and 2 would result in decreases in wildlife dependent on riparian areas.

Vegetation manipulation would reduce populations of small animals that are dependent on sagebrush. Reductions would occur on approximately 370,000 acres in Alternative 2 and 114,000 acres under Alternative 3.

No significant changes in deer populations are expected as a result of implementing any of the alternatives. Antelope would increase under Alternatives 2 and 3.

Significant improvement in stream fish habitat would occur under Alternatives 3, 4 and 5. Some deterioration of stream fish habitat would occur under Alternatives 1 and 2.

### Wild Horses

Temporary disturbances to wild horses would occur during the period of construction of range improvements under Alternatives 2, 3, 4 and 5. Wild horses would be allocated sufficient forage to provide for a maximum total population of 1,365 head under Alternative 1; 900 head under Alternative 2; 1,100 head under Alternative 3; 600 head under Alternative 4; and 3,666 head under Alternative 5.



## **Recreation**

Projected visitor use to 1990 would not be significantly impacted under any alternative. Localized visitor use reductions would be offset by localized increases in visitor use. Under all alternatives, area-wide 1990 projected visitor use for public lands in the EIS area would show an estimated 10 percent increase over existing levels.

## **Visual Resources**

Certain portions of the EIS area may experience slight degradation of visual quality due to contrast created by range improvements. Project design features, as well as VRM program procedures and constraints, would mitigate land form and vegetative contrast under all alternatives.

## **Special Areas**

Under Alternatives 3, 4 and 5, habitat for the Whitehorse cutthroat trout would be enhanced within the Whitehorse Basin ACEC. Grazing under all alternatives would not impact any other identified special area.

## **Cultural Resources**

Appropriate measures would be taken to identify and protect cultural sites prior to ground-disturbing activities. Therefore, adverse impacts would be mitigated on known cultural sites.

## **Socioeconomics**

Under Alternatives 1, 2, 3 and 4 personal income in Malheur County would increase over the short term. Alternative 5 would result in a short term decrease in personal income. Long term increases in personal income would occur under all alternatives. Employment would decrease under Alternative 5 during the short term. Long term increases in employment would occur under all alternatives. A short term net gain in ranch valuation would occur under Alternatives 2, 3 and 4. A short term net loss would occur under Alternative 5. Long term net gains in ranch valuation would occur under Alternatives 2, 3, 4 and 5. No changes in ranch valuation would occur under Alternative 1.



## Revision of the Preferred Alternative

Reexamination of the site-specific proposals and impact analysis as shown in the draft EIS and several letters of comment indicated that the riparian improvement objectives of the Preferred Alternative were not achieved by the proposals shown in the Draft EIS.

Therefore, the Preferred Alternative's (Alternative 3) grazing management proposed for streamside riparian areas has been revised for the final EIS. The revision affects site-specific proposals for grazing management on approximately 76 miles of stream. The major change would place more stream riparian areas under deferred rotation management, which would exclude grazing during July and August every year.

The revised proposals are shown in Table 3-5 of this document. More stream miles are located in areas under the Rest Rotation 4 and the Deferred Rotation 2 grazing systems. Conclusions regarding impacts on vegetation, soils, and condition and trend of wildlife habitat and fish habitat have been revised for Alternative 3 and are shown in Tables 1-2, 3-1, 3-4, 3-6, and 3-8 in this document. The site specific proposals are listed in Appendix G, Tables G-1 and G-3, as revised.

## Consultation and Coordination of the Draft Environmental Impact Statement

The Draft Southern Malheur Grazing Management Environmental Impact Statement (Interior DEIS 83-21) was filed with the Environmental Protection Agency and released to the public in April 1983 and open to comment until June 30, 1983. Informal public meetings were held in Jordan Valley and Vale, Oregon, June 7 and 9, 1983, to answer questions on the draft EIS.

Comments that presented new data, questioned facts or the adequacy of the impact analysis, or raised questions or issues bearing directly on the draft EIS were responded to in this final EIS. Several reviewers made various resource management recommendations. These recommendations, as well as all public input, will be considered before the final decision is made.

The letters which were received have been reproduced in this final, with each substantive comment identified and numbered. BLM responses immediately follow each of the letters.

## Response to Comments

All comment letters received were assigned an index number.

Number	Agency, Organization or Individual
1	USDI, Bureau of Reclamation
2	Environmental Protection Agency
3	Dr's. G. Robinson, E. B. Robinson Jr. and L. Robinson
4	Mike Hanley and Malheur County Cattlemen's Association (Public Lands Committee)
5	Oregon Intergovernmental Relations (A-95 Clearinghouse) Agriculture Fish and Wildlife
6	Sierra Club - Oregon Chapter
7	Wildlife Management Institute
8	Natural Resources Defense Council Inc.
9	MAZAMAS
10	John Bishop (Member Vale Grazing Advisory Board, Multiple Use Council, Malheur County Water Quality Committee)
11	Peter A. Bowler
12	Robert H. Skinner
13	Carroll W. Palmer and Carroll Palmer Jr.
14	Barrett, Hanna, Daly & Gaspar (American Horse Protection Assn., Inc.)
15	Audubon Society of Portland
16	Bob Powne
17	Dr. Theodore T. Cowgill
18	USDI, Fish and Wildlife Service





United States Department of the Interior  
BUREAU OF RECLAMATION  
PACIFIC NORTHWEST REGION  
FEDERAL BUILDING & U.S. COURTHOUSE  
BOX 943-550 WEST FORT STREET  
BOISE, IDAHO 83724

IN REPLY  
REFER TO  
PN 150  
120.1

MAY 19 1983

Memorandum

To: District Manager, Bureau of Land Management, Vale, Oregon

From: Regional Environmental Officer, Boise, Idaho

Subject: Southern Malheur Grazing Management Program, Draft Environmental Impact Statement (DES 83/21)

The subject statement has been reviewed by appropriate members of our staff, and we have no objections to the content of the document. Please let us know if we can be of further assistance in the review process.

*John C. Edwards*



U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION X  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

REPLY TO  
ATTN OF  
M/S 443

MAY 19 1983

Fearl M. Parker, District Manager  
Vale District, Bureau of Land Management  
P. O. Box 700  
100 East Oregon Street  
Vale, Oregon 97918

Re: Draft EIS--Southern Malheur Grazing Management Program

Dear Mr. Parker:

The Environmental Protection Agency (EPA) has reviewed the Southern Malheur Grazing Management Program Draft EIS. We have no comments to offer at this time. We look forward to receiving a copy of the Final EIS.

EPA has rated this Draft EIS LO-1 [LO--Lack of Objection; 1--Adequate Information]. We appreciate the opportunity to review the report. Should you wish to discuss any aspect of EPA's review, please contact Richard Thiel, Environmental Evaluation Branch Chief, at 442-1728 or (FTS) 399-1728.

Sincerely,

*L. Edwin Coate*

L. Edwin Coate  
Acting Regional Administrator

30 Nangle Ave  
Marlboro, MA 01752  
May 24, 1983

District Manager  
Box 700  
Vale, Oregon

Dear Mr. Parker:

Here are our comments on the Southern  
Malheur Grazing Management Draft  
Impact Environmental Statement (EIS).  
We have studied all the alternatives  
discussed, and the only alternative  
we advocate is Alternative Number 5 -  
Emphasize Wild Horses. We feel  
very strongly in favor of Number 5.  
Please record this feeling.

Sincerely,

Dr. W. Robinson

Dr. E. B. Robinson Jr  
L. Robinson

6

THESE IRONS IN OREGON SINCE 1852

Y7S

HANLEY RANCH  
JORDAN VALLEY, OREGON 97910

Mike Hanley

Fearl Parker  
District Range Manager  
Bureau of Land Management  
Vale District

Dear Fearl:

I find the Southern Malheur Grazing Management Program (Draft EIS) largely acceptable. However my main concerns do not fit into any particular alternative but concern all of them.

1. Maintenance of the more expensive projects within the area of the EIS may effect future use of and demands upon certain allotments. I would like to see the final reflect a study made on total benefits from projects so that the costs of maintenance could be offset by contributions from other sources. I realize that this is a grazing EIS but we all know that potential for serious problems exists here and this would be a good place to address it.

2. I would certainly think it wise to have an exact requirement of the wild horse in the EIS area covered in the document. I know at this time you do not know how many horses these lands must accommodate but they must be kept at the 1971 level. The Wild Horse and Burro Act came very close to requiring this. There also must be provisions somewhere, if not in this document, in regulations being written to control horses and burros, that allow for animals to be removed from lands threatened by them. If need be they could be reduced from the 1971 level but to never exceed it.

Another point is that horse use must not be shifted from one area to another in larger numbers than existed in these areas prior to passage of the Wild Horse and Burro Act in 1971.

Mike Hanley  
Comments prepared for myself and  
the Malheur County Cattlemen's  
Association. (Public Lands  
Committee)

AST 10 M	Chief Div. Oper	Acctg. Personnel	ENR Mgr	SHA Mgr	ENR Mgr
Albany	Eng. Safety Eng	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Boston	Chief Div. Admin	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Buffalo	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Chicago	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Cincinnati	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Cleveland	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Columbus	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Dallas	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Detroit	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
El Paso	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Fort Worth	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Houston	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Los Angeles	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Memphis	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Minneapolis	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Miami	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Mobile	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
New York	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Oakland	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Orlando	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Philadelphia	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Pittsburgh	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Raleigh	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
San Antonio	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
San Diego	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
San Francisco	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Seattle	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
St. Louis	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Tampa	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Tucson	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Wash. D.C.	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Wichita	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr
Yonkers	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr	ENR Mgr

7 June

Mike Hanley



## Response to Comment Letter 4

4-1

Although it is recognized that there are resources other than livestock that benefit from range improvements (such as wildlife and wild horses), the BLM maintenance policy states that "parties deriving primary benefit(s) from a structural improvement shall be responsible for maintaining that improvement". "Primary benefits" constitute more than 50% of the benefits realized. It further states that "the maintenance of improvements not designed for the primary benefit of livestock grazing may be assumed by the Bureau or nonlivestock operators..."

4-2

However, as provided in 43 CFR 4700.0-6, "free roaming wild horses and burros where found on public lands shall be considered comparably with other resource values in the development of resource management plans under the Bureau's planning system including allocation of appropriate portions of the available forage". For analysis purposes, alternatives in the DEIS present a range of forage allocations which would support various wild horse population levels. 43 CFR 4740.3 also provides for removal of wild horses "to restore a thriving natural ecological balance to the range and to protect the range from deterioration associated with overpopulation..."



## Executive Department

155 COTTAGE STREET NE., SALEM, OREGON 97310

June 29, 1983

Mr. William Gilmore, EIS Team Leader  
Bureau of Land Management  
Vale District Office  
P.O. Box 700  
Vale, OR 97918

Dear Mr. Gilmore:

Thank you for submitting the subject draft Environmental Impact Statement for State of Oregon review and comment.

The draft was referred to the appropriate state agencies. The Oregon Department of Fish and Wildlife and the Department of Agriculture offered the enclosed comments which should be addressed in preparation of the final Environmental Impact Statement.

We will expect to receive copies of the final statements as required by Council of Environmental Quality Guidelines.

Sincerely,

INTERGOVERNMENTAL RELATIONS DIVISION

*Dolores Streeter*  
Dolores Streeter  
A-95 Coordinator

DS:bm  
Enclosures



OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM  
STATE CLEARINGHOUSE

Interdepartmental Relations Division  
155 Cottage St NE Salem, Oregon 97310  
Phone: 378-3732

JUN 09 1983

P N P S STATE R F V I F W

Project #: 074000-080-4 Return Date: JUN 10 1983

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

TO STATE CLEARINGHOUSE: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

- (X) It has no adverse effect.
- ( ) We have no comment.
- ( ) Effects, although measurable, would be acceptable.
- ( ) It has adverse effects. (Explain in Remarks Section)
- ( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)
- ( ) Additional comments for project improvement. (Attach if necessary)

REMARKS (Please type or print legibly)  
Primary concerns of the Ag industry relating to range management include:

- riparian management,
- wild horse populations,
- increased forage production for livestock grazing,
- erosion, and
- water quality and quantity.

Therefore, the preferred alternative, #3, a cost effective proposal, is favored. Alternative #3 provides a good balance of usage by livestock and wildlife and an acceptable level of wild horses. We support the positive effect on ranch property values, the increase in forage production and the emphasis on erosion control and riparian management.

Agency Ogallala

PNRS #2

By \_\_\_\_\_ Phone Number \_\_\_\_\_



OREGON PROJECT NOTIFICATION AND REVIEW SYSTEM  
STATE CLEARINGHOUSE

Interdepartmental Relations Division  
155 Cottage St NE Salem, Oregon 97310  
Phone: 378-3732

JUN 16 1983

P N P S STATE R F V I F W

Project OR 830503 080-4 Return Date: JUN 10 1983

To Agency Addressed: If you intend to comment but cannot respond by the return date, please notify us immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

PROGRAM REVIEW AND COMMENT

TO STATE CLEARINGHOUSE: We have reviewed the subject Notice and have reached the following conclusions on its relationship to our plans and programs:

- ( ) It has no adverse effect.
- ( ) We have no comment.
- ( ) Effects, although measurable, would be acceptable.
- (X) It has adverse effects. (Explain in Remarks Section)
- ( ) We are interested but require more information to evaluate the proposal. (Explain in Remarks Section)
- (X) Additional comments for project improvement. (Attach if necessary)

REMARKS (Please type or print legibly)  
*Comments Attached*

RECEIVED

MAY 5 1983  
OREGON FISH & WILDLIFE  
HEADQUARTERS

Agency F41a

PNRS #2

By R. Dyer Phone Number 219 5040



General Comments

The Oregon Department of Fish and Wildlife feels that the alternatives offered were much too strictly tailored and preclude adequate habitat protection for wildlife. ODFW suggests that a blend of features from several alternatives can be used to create an acceptable alternative which will meet BLM management objectives and provide the level of habitat protection needed to meet ODFW objectives. The preferred alternative (3) will not provide acceptable levels of protection for wildlife habitat and restoration of degraded riparian vegetation and watersheds. The DEIS does not adequately address corrective and protective measures for several adverse impacts which are continuing or are predicted for important habitat components such as sage grouse habitat, aspen groves, upland meadows, and nesting habitat for water associated birds.

Specific Comments

Page XII, Soils: An acceptable long-term streambank stabilization level should be nearer to 80 percent as estimated for alternatives 4 and 5 instead of 60 percent.

Page XII, Wildlife: Paragraph 1: Small mammals, birds and fish dependent on riparian areas would probably show an overall decrease since more acreage of this habitat is going to be in a decreasing condition than will be improved. Refer to page 43, Riparian Vegetation, paragraph 3: 163 acres versus 342 acres; also page 48, table 3-6.

Page XII, Paragraph 2: The reduced populations of small animals dependent on sagebrush will also result in reduced raptor populations (Thompson, Johnstone and Littlefield et al. 1982). The DEIS should address this important raptor-prey relationship and the probable impacts of the proposed actions on raptor populations.

Page 5, all alternatives: The predicted long-term increase in livestock forage production should include an upward adjustment for wildlife forage allocation. Under Alternative 3 this would increase from 5,296 to 6,124 AUM's.

Page 19, Wildlife: Coyote and bobcat need to be discussed since sage brush removal will significantly affect these species. Both need cover for hunting prey species and removal of cover will reduce the populations in affected areas.

Page 19, Habitat Diversity: Upland habitat diversity should also be mentioned since it is important to a number of different wildlife species, e.g. raptors, prey species.

Page 19, Table 2-4 corrections:

Mule Deer - winter range = 602,880 acres, 16,000 deer  
summer range = 2,519,040 acres, 14,000 deer  
Pronghorn - winter population = 3,000 instead of 2,500

Sage grouse - nesting habitat; 98,800 acres is far too low an estimate. The actual amount of nesting habitat is estimated to be between 198,000 acres and 296,000 acres. More thorough strutting ground inventories are underway by ODFW in order to better document important sage grouse habitat areas.

Page 20, Riparian Areas: Table 2-5 lists 173 streamside miles and 2,118 acres of riparian zone in good condition. This does not present a true picture since these figures include 78 miles and 1,840 acres located in unallotted acres (footnote 2). This method of presentation is misleading to the reviewer and infers that riparian vegetation under grazing management is in much better condition than is actually the case. In reality, only 95 miles and 278 acres are in good wildlife habitat condition within the allotment areas. The table should display this information.

Page 20, Fish, second paragraph: Fish list should include Eagle Lake rainbow trout, channel catfish, and bluegill. Third paragraph: fish list should include coarse scale suckers, dace, chiselmouth, squawfish, carp, Lahonton redside and Tahoe suckers.

Page 23 and 24, Tables 2-6 and 2-7: each have several errors but these have been discussed with Vate District BLM.

Page 24, Mule Deer and Antelope, second sentence should read as follows: About 16,000 deer winter on ranges in the EIS area, etc. Second paragraph, last sentence discusses upland aspen stands and livestock damage. What measures are going to be taken to alleviate the problem of depleted cover and forage and ensuring lower deer populations? Third paragraph: should read about 14,000 deer summer on public lands etc, etc.

Page 25, Other Mammals, Other Birds, Reptiles and Amphibians, Second paragraph (sage grouse): What measures are going to be implemented to protect these important sage grouse leks and adjacent nesting habitat? What measures are planned to protect upland and streamside meadows which are important to the young birds? Third paragraph, second sentence: insert words "mountain quail" after "California quail" to read as follows: California quail and mountain quail are closely associated with brushy riparian areas, etc.

Page 33, Table 2-14: should present data for trapping activity on fur animals. During 1981-82 season 226 licensed trappers reported taking 11,941 animals worth \$149,296 in Malheur County. Trapping licenses are not required for taking of coyotes, so not all coyote pelts were reported. Estimated total income for the EIS area is at least \$50,000.



5-14 Page 36, assumptions for impact analysis: Under the new rangeland "stewardship" program, the \$7.4 million BLM budget cut and proposed elimination of 50 BLM jobs, what assurance do you have that the assumptions dealing with monitoring and maintenance of range improvements and proper attention to grazing practices are valid? The potential loss of control over grazing systems and the greater freedom of operation which is implied under this policy would seem to call for a sixth alternative for consideration in the GMP.

Table 3-1, page 36: Alternatives 4 and 5 show less impacts on streamside riparian vegetation and are therefore the only acceptable alternatives.

Page 37-41, Grazing Systems: Winter Grazing (W), Early Spring (EA), Rest Rotation Grazing and Exclusion appear to be the only systems acceptable to the Department for adequate protection of woody key riparian vegetation species.

5-15 Page 43, Riparian Vegetation, third paragraph. The only acceptable levels of streamside riparian protection and improvement appear in Alternatives 4 and 5. Alternatives 1, 2 and 3 would not comply with ODFW goals and standards. The Vale District has done an excellent job in the last 10 years in enhancement of riparian vegetation in several watersheds. The Department encourages the continuation of this trend as the decision process is completed for the Southern Malheur Grazing Program.

5-16 Page 46, Impacts on Wildlife: Serious secondary impacts on sage grouse and deer could result from conversion of brush to grass, especially in Alternative 2. Very careful planning would be needed in Alternative 3 to minimize adverse impacts in McDermotte, Cherokee, Indian and Cottonwood creeks which contain important sage grouse nesting and rearing habitat.

5-17 Page 51, fourth paragraph: Appears to have conflicting statements regarding species density fluctuations due to sage brush removal, e.g. the increased "edge" would probably be offset dramatically by the losses in animals and birds due to brush control projects. The loss of raptors, because of sage brush areas, probably would be much greater than any gain in raptors around the seeding, at least for a short to intermediate time period.

Page 51, Table 3-10: Other Bird column should reflect reduced raptor populations as a result of loss (-L) of small mammals (orey species).

5-18 Page 52, Conclusion: Meaningful increases in riparian wildlife species would occur only under Alternative 4 and 5 as would fish habitat. The Department again emphasizes that further deterioration of riparian habitat should be discouraged in long-range plans to the greatest extent possible.

Page 52, paragraph 6: The Department opposes any alternative which would cause decreases in the sage grouse populations. Grazing management plans should not include any practices which would not protect or enhance important wildlife habitats.

5-19 Page 52, paragraph 7: Sagebrush control on key winter ranges during some winters could reduce mule deer populations. Deer depend on this plant for forage under severe winter conditions.

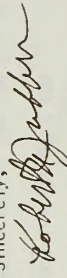
5-20 Page 53, Impacts on Recreation: The annoyance caused to a recreationist by a fence is an emotional problem of the individual and hardly a valid concern of BLM when an important resource is at stake. The Department feels that the minimal amount of impedance to public access is an invalid concern. The entire paragraph should be deleted from the DEIS.

The following table presents a list of watersheds in need of "special" consideration. This of course does not imply that the Department would approve of downward trends of any watersheds in the EIS area.

Watersheds and Riparian Areas Needing "Special Protection"			
Priority	Stream	Area	Reason for Protection
7.	Carter Creek	RM 5 to headwaters	Protect endemic redband trout habitat
5.	Cottonwood Creek	RM 13 to headwaters	Improve native trout habitat
6.	Little Owyhee River	RM 30 to headwaters	Improve native trout habitat
3.	McDermitt Creek	Above Zimmerman Ranch to headwaters	Needs improved watershed protection
4.	Oregon Canyon Cr.	Above Echave Ranch to headwaters	Needs improved watershed protection
1.	Whitehorse Creek drainage including Little Whitehorse Ranch	All public lands above Whitehorse Ranch	Continued watershed protection, improved water quality, erosion abatement and preservation of endemic cutthroat trout and their habitat
2.	Willow Cr. drainage	" "	" "

We appreciate this opportunity to review and comment on this document and trust that reasonable consideration will be given to the concerns of the Oregon Department of Fish and Wildlife in protecting and improving wildlife habitat.

Sincerely,



Robert N. Jubber  
Forest Policy Coordinator  
Environmental Management Section

BJ:sw

cc: Pearl Parker, District Manager



References cited:

Thompson, S.P., R.S. Johnstone, and C.D. Littlefield, 1982. Nesting History of Golden Eagles in Malheur-Harney Lakes Basin, Southeastern Oregon, 15 pages.

Response to Comment Letter 5

5-1

The alternatives analyzed in the EIS do not propose any specific, corrective measures for sage grouse habitat, aspen groves or upland meadows. Grazing systems in all alternatives would result in increases in herbaceous key species (see Table 3-2) and generally improve these areas for wildlife. The Standard Procedures and Design Elements for Range Improvements (Appendix D) contain elements which would protect sage grouse habitat from adverse impacts due to vegetation manipulations. One of the standard procedures requires coordination with Oregon Department of Fish and Wildlife (ODFW) field personnel during the layout and design of proposed vegetation manipulations.

Most of the water-associated bird nesting habitat in the EIS area is located at Cow Lakes and Hatch Lakes and receives little or no use by livestock. Several smaller but important nesting areas are located in existing enclosures which would be maintained under all alternatives. Additional protection from livestock grazing of water-associated bird nesting habitat is proposed under Alternatives 3, 4 and 5 as described on page 50 of the Draft EIS.

5-2

See "Revision of the Preferred Alternative" section. Also see text change, page 43.

5-3

Several prey species, notably ground squirrels, have proliferated in crested wheatgrass seedings, directly influencing some of the highest known densities of nesting raptors (Lardy 1978). The effects of treatments on prey species are largely due to the design of the treatment. Although short-term, localized reductions in predator species may occur, no long-term change in raptor populations in the EIS area is expected to occur because (1) many vegetation manipulations will have a mixture of grasses, forbs, and palatable shrubs seeded that prey species depend upon, (2) natural reestablishment of sagebrush within a 5 to 10 year period also would increase structural diversity, and (3) design of the treatment would maintain from 10 to 20 percent of the existing sagebrush in "leave strips".

5-4

Forage for big game is not a factor limiting population increases within the majority of the EIS area. Numerous utilization studies of grasses and browse shrubs during the past 20 years (1963-1983) have documented that a large surplus of preferred big game forage is normally present. Thermal and hiding cover appear to be the principal factors limiting mule deer population expansion.

The wildlife allocations shown in the EIS include only consumptive uses by mule deer and pronghorn antelope. Allocations to non-consumptive uses, which vary from 2,050 AUMs (Alternative 2) to 120,591 AUMs (Alternative 5) are designed to satisfy the consumptive and non-consumptive requirements of big game, small game and non-game for forage and cover.

The amount of forage within the non-consumptive allocation would be available for consumption by big game although the allocation to wildlife (5,296 AUMs) is sufficient to provide enough forage to satisfy the management objectives provided by ODFW field personnel. The long-term allocations displayed in the Draft EIS are for analysis purposes only. The decision to be made early in 1984 will determine initial allocations only.

5-5 No significant impacts to bobcat and coyote populations through the proposed vegetative manipulation program are expected. Bobcat would not be affected due to their preference for more rugged terrain which is not proposed for vegetation manipulation under any alternative. Coyote apparently suffer little adverse impact from sagebrush removal, judging from present high population levels following the Vale Project.

5-6 The Habitat Diversity section on Page 19 of the Draft EIS discusses upland habitat diversity.

5-7 See text change, page 19, Table 2-4.

5-8 Data in table 2-5 of the Draft EIS is presented for the entire EIS area. Unallotted vs. grazed riparian areas are further discussed on page 17, paragraphs 3 and 4, and page 43, Vegetation, paragraph 2 of the Draft EIS. Each presentation of riparian data points out the amount of riparian acreage located in unallotted areas.

5-9 Tables 2-6 and 2-7 of the Draft EIS were intended to show only major species. The additional species have been added to the text (See text change, page 20).

5-10 See text change, page 24 and response to comments 5-1 and 5-4.

5-11 Neither the Oregon Department of Fish and Wildlife nor the BLM has a complete inventory of sage grouse leks within the EIS area. Prior to any vegetation manipulation, the area to be treated would be inventoried and important sites would be excluded from treatment. Upland meadows vegetation would be grazed under the same system as the surrounding upland and is expected to respond similarly to upland herbaceous vegetation as discussed under each grazing system in the vegetation section of Chapter 3 of the Draft EIS. Streamside meadow vegetation is included in the discussions of riparian herbaceous vegetation. The effects of various grazing systems on herbaceous vegetation are summarized in Table 3-2, page 38 of the Draft EIS.

5-12 See text change, page 25.

5-13 As stated on page 33, wildlife trapping provides minor amounts of local income and employment. It was concluded that the alternatives would have no significant impact on fur-bearing populations. Therefore, no economic analysis was prepared.

5-14 All cooperative management agreements including the Rangeland Stewardship Program would incorporate the land use objectives included in the alternative adopted and would be monitored for compliance just as in areas where cooperative management agreements do not exist. Therefore, the new cooperative management program would have impacts similar to those already addressed.

5-15 See "Revision of the Preferred Alternative" section.

5-16 See response to comments 5-1, 5-4 and 5-11.

5-17 See response to comment 5-3.

5-18 See "Revision of the Preferred Alternative" section.

5-19 To minimize such loss the Vale District has, since 1963, consulted and cleared proposed sagebrush control projects with biologists of the Oregon Department of Fish and Wildlife. This process will be continued.

5-20 Recreation is also an important resource of BLM lands. The annoyance to recreationists is a valid concern to BLM because anger of fishermen, hunters, etc., to new fences occasionally results in fence cutting, post removal and gate destruction. Also some recreationists view fences as an attempt to keep people out as well as livestock.



## SIERRA CLUB ... Oregon Chapter

In reply contact: 755 NE Circle Blvd. #17  
Corvallis, Oregon 97330  
503-758-0043

Mr. Pearl M. Parker  
Vale District Manager  
Bureau of Land Management  
P.O. Box 700  
Vale, Oregon 97148

Dear Mr. Parker:

These are the comments of the Oregon Chapter of the Sierra Club on the Grazing Draft Environmental Impact Statement for the Southern Malheur Grazing Management Program of the Vale BLM District. Our group is very concerned about a number of issues addressed in this document.

The policies that follow should be implemented on these lands:

1. The paramount objective in the management of these lands is to protect and improve the productivity of the range and the condition of the watersheds. The various multiple uses should be managed within the constraints imposed to protect such watersheds.
2. Lands that are unsuitable for grazing should be identified and permanently excluded from that use (includes lands easily eroded because of steepness, aridity, or insufficient cover).
3. Livestock use in the spring should be deferred until the vegetation is ready and the ground dry enough to prevent permanent damage.
4. Sufficient forage should be left after grazing to protect and enrich the soil, reduce evaporation, induce water infiltration, and encourage root system development of native plants.
5. Measures to correct damage from grazing should be taken first where the greatest correctable damage is occurring.
6. Adequate food, cover, and other habitat should be reserved for wildlife, particularly during periods of nesting, breeding, and rearing of young, and for winter survival.
7. Wildlife concerns should be built into all decisions, including those on fence construction, vegetation manipulation, allotment management, and water improvements designed to benefit cattle.
8. Native fisheries should be protected and/or restored by providing for optimum water conditions and habitat.
9. Special consideration should be given to rare, threatened, and endangered species on both the federal and state lists.
10. R riparian areas should be given special protection through various measures such as grazing rotation and fencing to maintain and/or restore the quantity and quality of water, the health of streamside shrubbery and forage productivity, to prevent streambank erosion and to protect habitat for fisheries, waterfowl, and other wildlife. This includes the protection of springs, sandy areas, and places with high water tables.

To explore, enjoy and preserve the nation's forests, waters, wildlife, and wilderness ...

11. Wild horses should be eliminated from key wildlife habitat, including bighorn sheep winter range, and from designated natural areas. Elsewhere wild horse herd sizes should be minimized to avoid conflicts with wildlife, livestock, and other range values.
  12. Willful or negligent trespass cannot be tolerated.
  13. Grazing should be practiced in moderation to assure sustained forage productivity. Drought cycles must be taken into account in determining the amount of grazing use.
  14. Ranges in "poor" to "fair" condition should be managed to improve their condition expeditiously. A "no change" or "static" trend is unacceptable in ranges that are in poor or fair condition.
  15. Range modification projects, systems, and methods should be as simple as possible, easy to operate, and inexpensive to maintain. The range should not be managed and developed to a level of production sustainable only by artificial and periodic treatments.
  16. Developments such as fencing and water development should either benefit other uses or offer minimal interference to such uses.
  17. For necessary reseeding, native species should be favored.
  18. Fire is an acceptable management tool, provided wildlife and watershed protection are given adequate consideration.
  19. Until herbicides and pesticides are developed that control only targeted species and carry minimal health and safety risks, they should not be used.
  20. Agencies should hold public hearings on decisions that have significant impacts on multiple-use increases or reductions of grazing use management of riparian areas, ORV use, impacts on wildlife by water development, fencing or vegetative manipulation.
- None of the alternatives outlined in this document meet our concerns. Following are some comments and specific management recommendations and questions on the plans and issues described in this document.

### Riparian Areas:

Roughly 25 percent of the riparian areas in this area are classified as being in fair, poor, or unknown condition. The unknown areas contain much of the land in and surrounding the Trout Creek Mountains. The preferred alternative will help a few riparian areas, but many other areas will continue to deteriorate. Any area listed in the EIS as being in "fair" or "poor" condition should be relieved of severe grazing pressure as soon as possible. These riparian areas must be rehabilitated until woody vegetation and trees recover and a more natural state is achieved.

High priority areas for protection would include the habitat for the Whitehorse Cutthroat Trout, the Honeycreeper-Issle Gulch-Slocum Creek areas, and areas providing habitat for rare plants. Appendix G, Table G-1 shows that two streams, Little Whitehorse Creek and the Little Cwyhee River, will continue to have portions of the riparian habitat on these streams deteriorate under the projected management activities of the preferred alternative. Will this deterioration be in violation of the Wilderness Management Policies and Interim Management Programs for management of Wilderness Study Areas?



6-3

The proposed action provides minimal protection for riparian areas. We are encouraged by proposals to upgrade riparian habitat in those streams important as habitat for the Whitehorse Cutthroat Trout, but we question whether significant improvements in water quality will occur since portions of these streams will continue to see their riparian habitat degraded.

A map showing proposed exclusion areas similar to the one provided in the Andrews Grazing EIS on the Burns District would be helpful in analyzing the different alternatives. Please include such a map in the final EIS.

6-4

Brush Control: Using "range improvements" to describe brush control projects and seedlings requiring large scale applications of herbicides and planting of crested wheatgrass is deceptive. These projects are not improvements for many wildlife species, native vegetation, and in some cases water quality. The document should be changed to read "range alterations" in every place where "range improvements" is used in the Draft EIS. If you decide to not alter the terminology, please explain in the final EIS why you consider these projects to be improvements when studies have shown these projects to have serious destructive influences upon multiple use values of the public range.

6-5

One additional comment on this point. It is my understanding that individuals trained in public relations assist managers in drafting these documents to avoid "buzz words" likely to cause strong public reactions. In some cases this may be beneficial, but in most controversial issues such as brush control projects we would appreciate the BLM avoiding euphemisms. For example, a brush control project with a crested wheatgrass seedling will likely make the range capable of supporting more cattle, but the project will destroy habitat for most wildlife species using the range. We feel that it is very important for the BLM to clearly spell out the projected effects of land use decisions.

6-6

What effects will proposed water developments, brush controls, seeding projects, and grazing activities have upon raptor prey species? What effects will these activities have upon raptors themselves?

The Sierra Club opposes the use of chemical herbicides for brush control projects. We also oppose the use of crested wheatgrass or other non-native grass species for seeding projects.

6-7

Water: Ground and surface water supplies will be affected by some developments proposed under the different alternatives. What impacts will the proposed activities have upon ground water resources?

6-8

Horse Management Areas: Conflicts between bighorn sheep and wild horses can be expected in the Three Fingers herd management area. Will these impacts be significant?

Comments on the Draft EIS Document

6-9

1) In the Final Grazing EIS the Sierra Club would like a Comparative Impact Summary included similar to the one done in the Final Grazing EIS for the Bruneau-Kuna Resource Areas on the Boise District in Idaho.

6-10

2) All uninventoried streams and adjacent riparian habitats should be evaluated and that information included in the Final EIS. Ephemeral streams should be included in this analysis.

6-11

3) A map of existing brush control projects would be helpful in evaluating the significance and impacts of the proposals outlined in this document.

We encourage the District Manager to select Alternative 4 as the proposed alternative for grazing management activities. The initial livestock allocation will increase significantly over the 1981 active use levels. The Vale Project leaves the district with an abundant supply of grass. More attention should be paid during the next decade to protecting wildlife, wilderness, plant, water, raptor, fishery, and other natural resources to provide better multiple use benefits.

Thank you for the opportunity to comment.

Sincerely,

*Kelly O'Brian Smith*

Kelly O'Brian Smith  
BLM Issues Coordinator  
Oregon Chapter, Sierra Club



Response to Comment Letter 6

- 6-1 None of the riparian areas listed in unknown condition are located in the Trout Creek Mountains. Because of the importance of the streams in the Trout Creek Mountains to fish and wildlife, more time was spent inventoring these riparian areas than any other in the EIS area.
- 6-2 The preferred alternative has been changed resulting in the impact conclusions being revised. See "Revision of the Preferred Alternative" section.
- 6-3 The preferred alternative has been revised. See "Revision of the Preferred Alternative" section.
- 6-4 Proposed exclusions in the Southern Malheur EIS area are shown in tabular format in Appendix C, Table C-1, and Appendix G, Tables G-1 through G-3 of the Draft EIS. The only exclusions that are large enough to display on the small scale maps required by the size of this document are those in the wild horse herd areas under Alternative 5. The wild horse herd area boundary (shown on Figure 2-3 of the Draft EIS) would be the outside boundary of the livestock exclusion area.
- 6-5 As defined in Title 43 CFR 4100.0-5 and in the Public Rangelands Improvement Act of 1978 Sec. 3(f) the term "range improvement" is describing any activity or program on or relating to rangelands, designed to improve production of forage; change vegetative composition; control patterns of livestock use; provide water; stabilize soil and water conditions; and provide habitat for livestock and wildlife.
- 6-6 It is anticipated that there would be little or no effect on raptor prey species from the proposed water developments. Also see response to comment 5-3.
- 6-7 No significant impacts to ground water supplies are anticipated as a result of developments proposed under any of the alternatives. See page 46 of the Draft EIS.
- 6-8 Under all the alternatives analyzed in the DEIS, the Three-Fingers wild horse herd would be maintained at population levels which preclude possible forage and water conflicts with California big horn sheep. The present interrelationships of these two species have been documented in a doctoral thesis by Ganskopp (OSO 1983), who found no cause for concern due to habitat partitioning based on topography and forage preference.

6-9

Although the approach to the summary table in the Bruneau-Kuna Grazing EIS has some advantages, the impacts summarized in more detail are not significant impacts in the Southern Malheur EIS. See the Southern Malheur Draft EIS Table 1-1 for Summary of Components and Table 1-2 for Summary Comparison of Long-Term Impacts of the alternatives.

6-10

There are many ephemeral streams within the EIS area, but most do not contain water long enough to support riparian vegetation. Consequently, impacts to these streams are expected to be the same as those on upland sites. All important perennial and intermittent stream riparian areas on public lands were inventoried and included in the Draft EIS analysis.

6-11

In the Draft EIS Figure 2-1, Vegetation Types, shows most of the major existing brush control areas as grass. Seedlings shown on the map have had brush control prior to seeding by either herbicide, fire or plowing.





# Wildlife Management Institute

Suite 725, 1101 14th Street, N.W., Washington, D.C. 20005 • 202/371-1808

DANIEL A. POOLE  
President  
L. R. JAHN  
Vice-President  
L. L. WILUAMSON  
Secretary  
WESLEY M. DIXON, Jr.  
Board Chairman

District Manager  
Bureau of Land Management  
Post Office Box 700  
100 East Oregon Street  
Vale, Oregon 97918

June 21, 1983

Dear Sir:

The Wildlife Management Institute is pleased to comment on: PREFERRED LAND USE ALTERNATIVE, SOUTHERN AND NORTHERN MALHEUR RESOURCE AREAS and DRAFT ENVIRONMENTAL IMPACT STATEMENT, SOUTHERN MALHEUR GRAZING MANAGEMENT PROGRAM, Oregon.

A much better explanation is needed of the relationship between the two documents and whether the tables in each are partial, total or what? When part of a plan is already in effect and part is proposed, confusion exists unless explanations are clear.

The plan is not satisfactory for wildlife. The provisions for riparian improvement are not as extensive or intensive as needed. Livestock have abused these areas for 100 years; it is now time for a complete reversal and to consider the public values predominant.

There is not enough forage allocated to wildlife. The Oregon Department of Fish and Wildlife goals should be listed. What are they based on? In other areas, we found those goals to be based on current conditions only. If that is true here, then the potential will be lost to increase wildlife as habitat improves.

There is no discussion of the Vale project. Thousands of acres were treated, and hundreds of projects constructed at a cost to the United States of millions of dollars. What have been the results in increased AUM's, increased ranch values? How much of this subsidy has been returned to the government by grazing fees? The permittees in this area are probably the most heavily subsidized in the BLM system. We object to further subsidy and request that all costs be identified and set forth.

The present plan calls for \$2,542,000 in range development for 121 permittees. This comes to an average subsidy of \$21,008 per permittee (page 59, EIS). In addition, each permittee will have an average increase in the value of his ranch of \$33,140 in the short term and \$62,149 in the long term (page 58, EIS). All this at a time when BLM wildlife budgets are being drastically reduced. It is interesting to note that wildlife and fisheries generate \$2,900,000 a year and provide 154 jobs, while livestock generated \$15,700,000 and 476 jobs. Wildlife and fisheries are the second most important industry on BLM land and deserve more budget and improvement than they receive.

DEDICATED TO WILDLIFE SINCE 1911

Some specific comments follow:

## Preferred Land Use Alternative

Page 16, Table 4. What is the relation of "Livestock Active Preference" to "Average 5-year use" used in many BLM plans?

Page 19, last paragraph. This shows fencing riparian areas to be a last resort.

Page 29 (and 16). The wildlife forage allocations do not agree. As near as we can determine, the 5,334 AUM's for wildlife are tokenism on some 3.9 million acres of public land and with over 320,000 AUM's for cows.

Page 30. Streams number 3,9,10,12,13,30,31,32,33,36 will continue to have their determination in riparian systems as shown on Page 86 of the EIS.

Page 33, 2nd paragraph. Based on our observations and the EIS we believe this paragraph is misleading. The proposed grazing systems will not correct the already bad riparian areas. Monitoring is not needed, it is already known that improvement is needed.

## Environmental Impact Statement

Page 5, Alternative 3. This heavy utilization of forage by livestock may be all right on uplands, but is too high for already abused riparian areas with conditions still declining.

Page 5, Alternative 3, paragraph 4. Where does the improved 148 miles of riparian area come from? Page 48 shows only 55 miles will be in an upward trend, and on page 47, only 3 new miles of stream will be fenced.

Page 5, last paragraph. No fencing of a riparian area can have a positive cost-benefit ratio. They are a public benefit and resource and should be so managed. We have yet to see range improvements where the grazing fees even paid interest on the construction debt.

Page 20, Table 1-5. 140 miles of riparian area is in fair and poor condition. This is unacceptable. Management is needed and should be planned.

Page 24. Populations of deer are 4 percent below Oregon Department of Fish and Wildlife goals. Is this the present habitat goal, or one that contemplates improved habitat? This difference has created misunderstanding in other BLM plans, and can reduce the potential for long-range wildlife forage.



June 21, 1983

Page 47, Table 3-5. A new midrange of fencing is needed between Alternative 3 (4 miles) and Alternative 4 (17 miles). If this were done it would eliminate many of our objections to the plan.

Page 48, Table 3-6. The long-term trend in problem riparian areas will continue.

These remarks have been coordinated with William B. Morse, the Institute's Western Field Representative.

Sincerely,

*Daniel A. Poole*

Daniel A. Poole  
President

DAP:1bb

Response to Comment Letter 7

- 7-1 The relationship between the Preferred Land Use Alternative document and the draft Grazing Management EIS is explained in the sections titled "Planning Units" (on page 5) and "Summary and Results of Grazing EIS Scoping" (on page 13) of the Preferred Land Use Alternative document and Appendix A (page 64) of the Draft EIS. Recommendations included in the Preferred Land Use Alternative document that do not involve grazing or wilderness management have been approved for implementation by the Oregon State Director. Wilderness will be addressed in a RIM Oregon Wilderness EIS and in the Owyhee Canyonlands Wilderness EIS while grazing is addressed in the Southern Malheur EIS. The livestock grazing management portions of the Preferred Land Use Alternative form the basis for alternative 3 analyzed in the DEIS.
- The tables listed in the Preferred Land Use Alternative document apply to the Southern Malheur Environmental Impact Statement area, which covers the Southern Malheur Resource Area and the southern portion of the Northern Malheur Resource Area (refer to the location map on page 6 of the Preferred Alternative document).
- 7-2 See response to comments 5-4 and 12-1. Oregon Department of Fish and Wildlife Management objectives have been published and are available upon request from them. See References Cited, page 101 and 102 of the Draft EIS for listings of Oregon Department of Fish and Wildlife, 1981a and 1981b.
- 7-3 Since the beginning of the Vale Project in 1962 the grazing capacity has increased by 177,000 AUMs. See page 14 of the Draft EIS for total cost of the Vale Project. Other benefits derived from the increased perennial grass cover, including improved water quality and improved wildlife habitat continue to accrue. Since 1962 \$8.3 million in grazing fees have been received by the Vale District. It is estimated that 31 percent of the total fees received or approximately \$2.6 million are attributable to investments made during the Vale Project. The grazing fee formula is established by law. Grazing fees have varied from \$.29 to \$2.36 during the last 20 years.
- 7-4 Livestock Active Preference indicates the amount of AUMs which could be authorized for use based on the availability of forage. "Average 5-Year Use" indicates an average of what was actually licensed for use. The Southern Malheur DEIS shows the 1982 active use--the amount of use which was actually authorized during 1982.
- 7-5 The utilization levels shown for Alternative 3 on page 5 would be the maximums for upland forage species in pastures which are in middle or late condition and under grazing management. Utilization levels in riparian areas are primarily a function of the timing of grazing in the pasture where the riparian vegetation occurs. Heavy



# Natural Resources Defense Council, Inc.

25 KEARNY STREET  
SAN FRANCISCO, CALIFORNIA 94108  
415 421-6761

Washington Office  
1725 I STREET, N.W.  
SUITE 600  
WASHINGTON, D.C. 20006  
202 223-8210

New York Office  
122 EAST 42ND STREET  
NEW YORK, N.Y. 10168  
212 949-0049

June 23, 1983

Fearl M. Parker  
District Manager  
P.O. Box 700  
100 East Oregon Street  
Vale, OR 97918

Re: Southern Malheur Grazing Management  
Draft Environmental Impact Statement

Dear Mr. Parker:

We have reviewed the above-captioned draft environmental impact statement (EIS) and submit these comments on behalf of the Natural Resources Defense Council, Inc. (NRDC). Overall, we found the EIS to be useful and informative. In particular, we are pleased that the EIS includes allotment-specific resource data and that the Bureau has utilized these data to formulate specific, detailed proposals and alternatives for each of the allotments. In several important respects, however, we believe the EIS fails to satisfy the requirements of the National Environmental Policy Act (NEPA).

First, while the EIS contains extensive allotment-specific information with respect to range condition, trend, soil erosion, and current use, it fails to identify the estimated current and future grazing capacity of each allotment. Such estimates are essential to ensure that the Bureau complies with its legal obligation to prevent overgrazing. See, e.g., 43 C.F.R. §§ 4100.0-2, 4110.3-2(b), 4120.2-1(a) (1982). The EIS concedes that overgrazing is now occurring on 922,049 acres (p. 2), but these areas are never identified, so that it is difficult to determine whether the proposed action or any alternatives will reduce grazing in these areas. The EIS states that "[l]ivestock forage production for each allotment is listed in Appendix B, Table B-1" (p. 14), but that table only lists proposed forage allocations under each alternative. We urge the Bureau to provide estimates of present and future grazing capacity in the final EIS, or identify this information more clearly if it is hidden somewhere in the draft EIS.

Second, although the EIS analyzes alternative livestock grazing numbers, utilization levels, and grazing systems, the alternatives are unreasonably narrow in significant respects. The EIS lacks a "no grazing" alternative, even though some members of the public requested such an alternative during the scoping process. (EIS, p. 64). Consideration of "no grazing" is particularly important in areas where

18

New England Office: 17 ERIE DRIVE • NATICK, MA 01760 • 617 665-2656  
Public Lands Institute: 1720 RACE STREET • DENVER, CO 80206 • 303 377-9740

100% Recycled Paper

utilization in riparian areas generally occurs only during summer and fall months. Riparian areas in poor or fair wildlife habitat condition and having significant potential for improvement would be either excluded or managed under a grazing system which would limit grazing use during the summer months under Alternatives 3, 4 and 5.

7-6 Under Alternative 3, grazing systems were designed to improve 148 miles of riparian habitat with medium or high improvement potential. However, the results of the impact analysis showed that not all the grazing systems selected for riparian pastures meet this objective. Alternative 3 has been revised. See "Revision of the Preferred Alternative" section and revised impact analysis tables.

7-7 See response to comments 5-4 and 7-2.

7-8 There is an apparent misinterpretation of the Table 3-5. Fenced Federal Range does not mean exclusion of livestock grazing. Fenced Federal Range is a grazing system (see page 94 of the Draft EIS for definition). The purpose of Table 3-5 is to display the acres and miles of streamside riparian habitat under the various grazing systems for each alternative. The amount of acres fenced to exclude livestock grazing ranges from 74 in Alternative 1 to 452 in Alternative 5 under the exclusion grazing system.

8-1

8-2



8-2 there are serious conflicts between livestock grazing and other values, such as wildlife, or where continued grazing will degrade resources or prevent needed improvement in resource conditions. Such areas do exist in this EIS area. For example, the EIS concedes that twenty to forty years of "complete rest" are necessary for some 334,000 acres of poor condition range to recover completely from resource deterioration (p. 42), but it fails to identify such areas or to propose to eliminate grazing in them. Even the alternative ostensibly designed to "emphasize non-livestock values" would not exclude grazing from all the areas in need of protection. (Summary Table 1, p. 2).

8-3 The alternative allocations of forage are also unreasonably biased toward livestock grazing and against wildlife and wild horses. For example, under all of the alternatives, all future increases in forage production would be allocated to livestock grazing. At a minimum, the alternatives that "emphasize non-livestock grazing values" and "emphasize wild horses" should allocate some of this additional forage to wildlife, wild horses, and nonconsumptive uses.

8-4 In addition, none of the alternatives considers allocating more than 5296 AUMs to wildlife. In fact, no alternative allocations to wildlife are even considered. We agree with those members of the public who asked the BLM during scoping to analyze allocating additional forage to wildlife, and not simply to defer to the stated wildlife objectives of the Oregon Department of Fish and Wildlife. (EIS, p. 64.)

8-5 We also believe it is inappropriate for the "emphasize non-livestock grazing" alternative to contain the lowest proposed numbers of wild horses. Wild horses are among the "non-livestock grazing values" of the EIS area and should therefore receive more forage under this alternative than under the "emphasize livestock grazing" alternative, not less. Necessary reductions in forage under this option should be allocated to livestock.

8-6 Third, the discussion of environmental impacts in the EIS, though excellent in some ways, is incomplete with respect to proposed "range improvements." For example, the EIS fails to acknowledge that implementing proposed water developments will expand the scope of livestock grazing considerably, resulting in conflicts with wildlife. More important, the EIS fails to discuss at all the possible adverse effects of herbicide spraying on wildlife, water quality, and human health. (EIS, pp. 41-42, 46.) Nor does the EIS specify which areas will be sprayed rather than burned, or consider the specific need for and alternatives to spraying. Given the significant uncertainties surrounding the use of 2,4D, including a number of scientific studies suggesting that it is carcinogenic, the EIS must discuss its potential adverse effects in detail and offer a "worst case analysis." See Southern Oregon Citizens Against Toxic Sprays v. Watt, No. 79-1098 (D. Ore. Sept. 9, 1982); 40 C.F.R. § 1502.22 (1982). The EIS should also analyze why other, less potentially hazardous methods of vegetation manipulation are not preferable

8-11 to spraying. Without such analysis, the BLM cannot determine how much, if any, spraying should be allowed.

8-12 In addition to the above-mentioned inadequacies of the EIS, we cannot support the "preferred alternative" because it fails to provide either sufficient protection for the resources of the area or true multiple-use management. First, we are opposed to any use of herbicide spraying to manipulate vegetation because of the potential health and environmental hazards and the availability of substitute techniques. Second, the preferred alternative allows livestock grazing to continue in many areas that need a "complete rest" to allow conditions to improve (EIS, p. 42); grazing should be prohibited in such areas in order to prevent unnecessary resource deterioration, as required by law. Third, we favor maximum protection for fragile riparian areas, but the preferred alternative will allow riparian conditions to decline on 342 acres. (EIS, p. 43.)

Instead of the "preferred alternative," we support adoption of Alternative 4, "Emphasize Non-Livestock Values," as modified to prohibit grazing where necessary to improve unsatisfactory range and riparian conditions and to allocate adequate forage to wild horses. Of the alternatives considered, it is the only one that appears to be consistent with the Bureau's statutory mandate to protect and improve the resources of the public lands and to manage for multiple use.

Thank you for this opportunity to comment and for your consideration of our views.

Sincerely,

*David B. Edelson*

David B. Edelson

*Johanna H. Wald*

Johanna H. Wald

DBE/JHW:klw



8-1

The current and future grazing capacity varies by alternative depending on the allowable utilization (shown for each pasture in Appendix C, Table C-1). Under the Preferred Alternative maximum utilization levels (50 percent on native range and 60 percent on seeded range) fourteen allotments would have initial reductions in the amount of livestock use. These allotments and the percentage of reduction proposed under the Preferred Alternative are listed below.

Allot. #	Allot. Name	Reduction
0307	Bonney Basin	16%
0400	Harper Basin	12%
0408	Mitchell Butte	64%
0412	Chalk Butte	12%
0500	Mahogany	7%
0502	Derrick	5%
0506	Birch Creek	11%
0602	Horseshoe T	3%
0604	Morger	6%
0901	Lodge	3%
0905	Oliver	10%
1002	Antelope	5%
1201	Fifteen Mile Common	2%
1202	McCormick	4%

See revised Appendix B, Table B-1 which shows the existing livestock forage production by allotment. This is the total amount of forage which could be consumed by livestock at the utilization levels proposed under the Emphasize Livestock Alternative. The future grazing capacity, which varies by alternative is the sum of the Long-Term Livestock (LTLV), Wild Horse (WH), Nonconsumptive (NC) and Wildlife (WL) allocations.

8-2

Neither the National Environmental Policy Act nor Council on Environmental Quality regulations (40 CFR 1500-1508) specifically require the analysis of a "no grazing" alternative. They do require a "no action" alternative, which in the context of an ongoing management program means "no changes" from current management levels. See 46 Federal Register 18027 (March 23, 1981). While on occasion it may be desirable to analyze such an alternative, in this instance, the Oregon State Director has the authorized discretion to determine that a "no grazing" alternative was not needed for the Southern Malheur Grazing EIS. Exclusions of livestock in specific areas where conflicts were identified are analyzed. Public comment during the scoping process and recommendations of Bureau specialists identified no EIS area-wide conflicts with livestock grazing. Total livestock exclusion (no grazing) is proposed for 889,784 acres, approximately 22 percent of the EIS area, under Alternative 5.

8-3

Appendix C, Table C-1 identifies the existing average range condition by pasture and allotment. Much of the 336,000 acres of early condition range is located in relatively small, historic livestock concentration areas which are scattered throughout pastures in middle or late condition. In upland areas it is not cost effective or desirable for proper livestock distribution to fence these early condition areas into separate units. In the time frame of the long-term analysis in the EIS (15 years) no improvement in range condition of these areas would occur if livestock were excluded.

8-4

The management objectives for big game populations were provided by Oregon Department of Fish and Wildlife field personnel. Since forage quantity on public land in big game herd areas is generally abundant, sufficient forage was allocated in all alternatives to satisfy these objectives without significant conflict with other consumptive uses; therefore the wildlife allocations do not vary by alternative. The Emphasize Non-Livestock Alternative does not allocate forage for a population of wild horses higher than minimum viable levels because public scoping comments clearly indicated the desire to have this alternative both de-emphasize commodity production and have a minimum level of horses. The decision to be made early in 1984 will determine initial allocations only. The long-term allocations discussed in the Draft EIS are for analysis purposes only. Future allocations would only be made after evaluations indicate that the forage is available on a sustainable basis and after an environmental analysis is made. All needs for forage would be considered at that time including wildlife and wild horses.

8-5

See response to Comment 5-4

8-6

The wild horse numbers are lower under the emphasize non-livestock alternative because the maximum allowable utilization (on which the determination of consumable forage is based) for that alternative is 40 percent on native range. In several of the herd areas, the total amount of forage which is available for allocation to consumptive uses (livestock, wildlife and wild horses) is lower under Alternative 4 than Alternative 2. Also see response to comment 8-4.

8-7

Competition for forage between livestock and big game through water development will be minimal with grazing systems designed to avoid competitive dietary overlap.

8-8

The impact discussion sections on wildlife, water quality and human health have been expanded. See text changes for pages 46, 50 and 55.



8-9

On all sites proposed for vegetative manipulation, burning is the preferred method for brush control. Spraying would occur only on sites with insufficient understory to carry fire, in areas where significant amounts of sprouting shrubs are present and in areas where control of fire would be difficult. This would be determined during design and layout of the specific project.

Vegetation manipulation was proposed where grazing management would not achieve the desired vegetative response within the long-term. Alternatives to spraying addressed in the EIS were burning and grazing management.

8-10

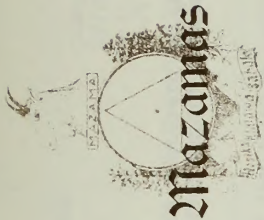
The court ruling (Southern Oregon Citizens Against Toxic Sprays (SOCATS) vs. Watt, U.S. District Court of Oregon, Civil No. 79-1098F8 dated September 9, 1982) which held that scientific uncertainty existed as to the human health effects to exposure to 2,4-D and which required a "worst case analysis" is currently being appealed to the 9th Circuit Court of Appeals. It is the government's position in that appeal that there is no refutable scientific evidence to suggest that 2,4-D is carcinogenic, that a worst case analysis is not required for 2,4-D and that the probability of any chronic genetic effects occurring from the field use of 2,4-D are either zero or incapable of being calculated or predicted and in any event extremely unlikely to occur. The BLM fully expects that the 9th Circuit Court of Appeals will reverse the district court decision in the SOCATS case. However, in the event the 9th Circuit should uphold the requirement for a worst case analysis, hopefully it will provide guidance on what constitutes an adequate worst case analysis. Based on this guidance, BLM would be able to develop a worst case analysis for eastern Oregon spray projects as a supplement to the EIS.

8-11

Brush control by herbicide and burning are the only methods that are cost-effective and would produce the desired vegetation response. Other methods considered were plowing, rilling and beating all of which were two to three times more costly.

8-12

See "Revision of the Preferred Alternative" section.



June 23, 1983

Mr. Earl M. Parker  
District Manager  
Bureau of Land Management  
P.O. Box 700  
Vale, Oregon 97918

Subject: Draft, Southern Malheur Grazing Management Program EIS

Dear Mr. Parker:

The Mazamas are an outdoor oriented recreation club of 2700 members based in Portland, Oregon. We use the public lands for many of our activities. In Southern Malheur we do white water rafting and back packing.

In general we support your Preferred Alternative #3 with some melding of riparian protection and low horse numbers from Alternative #4--the non livestock value emphasis. The change would keep cattle off the stream banks and out of riparian zones. In the long range this would improve the quality of the streams and even out their flow to some extent. We question your comment on stream bank erosion in table 1-2 on page 9 showing more erosion under Alternative 4 where the cattle would be kept out of 74,483 acres of riparian zones. Why?

As for the wild horse, it is a non-native species and to our way of thinking, their numbers need to be kept low. We are definitely in opposition to Alternative 5 with its wild horse emphasis.

As for grazing practices discussed in this EIS, we commend your discussion and consideration of various deferred grazing plans. The more acreage which can be allowed for plants to mature before the cattle are turned in, the more diversity of plants that will survive and the better the condition of the range. This is common

9-1

21

Mazamas Club - 1983 - 1984 - 1985 - 1986 - 1987 - 1988 - 1989 - 1990 - 1991 - 1992 - 1993 - 1994 - 1995 - 1996 - 1997 - 1998 - 1999 - 2000 - 2001 - 2002 - 2003 - 2004 - 2005 - 2006 - 2007 - 2008 - 2009 - 2010 - 2011 - 2012 - 2013 - 2014 - 2015 - 2016 - 2017 - 2018 - 2019 - 2020 - 2021 - 2022 - 2023 - 2024 - 2025 - 2026 - 2027 - 2028 - 2029 - 2030 - 2031 - 2032 - 2033 - 2034 - 2035 - 2036 - 2037 - 2038 - 2039 - 2040 - 2041 - 2042 - 2043 - 2044 - 2045 - 2046 - 2047 - 2048 - 2049 - 2050 - 2051 - 2052 - 2053 - 2054 - 2055 - 2056 - 2057 - 2058 - 2059 - 2060 - 2061 - 2062 - 2063 - 2064 - 2065 - 2066 - 2067 - 2068 - 2069 - 2070 - 2071 - 2072 - 2073 - 2074 - 2075 - 2076 - 2077 - 2078 - 2079 - 2080 - 2081 - 2082 - 2083 - 2084 - 2085 - 2086 - 2087 - 2088 - 2089 - 2090 - 2091 - 2092 - 2093 - 2094 - 2095 - 2096 - 2097 - 2098 - 2099 - 2100 - 2101 - 2102 - 2103 - 2104 - 2105 - 2106 - 2107 - 2108 - 2109 - 2110 - 2111 - 2112 - 2113 - 2114 - 2115 - 2116 - 2117 - 2118 - 2119 - 2120 - 2121 - 2122 - 2123 - 2124 - 2125 - 2126 - 2127 - 2128 - 2129 - 2130 - 2131 - 2132 - 2133 - 2134 - 2135 - 2136 - 2137 - 2138 - 2139 - 2140 - 2141 - 2142 - 2143 - 2144 - 2145 - 2146 - 2147 - 2148 - 2149 - 2150 - 2151 - 2152 - 2153 - 2154 - 2155 - 2156 - 2157 - 2158 - 2159 - 2160 - 2161 - 2162 - 2163 - 2164 - 2165 - 2166 - 2167 - 2168 - 2169 - 2170 - 2171 - 2172 - 2173 - 2174 - 2175 - 2176 - 2177 - 2178 - 2179 - 2180 - 2181 - 2182 - 2183 - 2184 - 2185 - 2186 - 2187 - 2188 - 2189 - 2190 - 2191 - 2192 - 2193 - 2194 - 2195 - 2196 - 2197 - 2198 - 2199 - 2200 - 2201 - 2202 - 2203 - 2204 - 2205 - 2206 - 2207 - 2208 - 2209 - 2210 - 2211 - 2212 - 2213 - 2214 - 2215 - 2216 - 2217 - 2218 - 2219 - 2220 - 2221 - 2222 - 2223 - 2224 - 2225 - 2226 - 2227 - 2228 - 2229 - 2230 - 2231 - 2232 - 2233 - 2234 - 2235 - 2236 - 2237 - 2238 - 2239 - 2240 - 2241 - 2242 - 2243 - 2244 - 2245 - 2246 - 2247 - 2248 - 2249 - 2250 - 2251 - 2252 - 2253 - 2254 - 2255 - 2256 - 2257 - 2258 - 2259 - 2260 - 2261 - 2262 - 2263 - 2264 - 2265 - 2266 - 2267 - 2268 - 2269 - 2270 - 2271 - 2272 - 2273 - 2274 - 2275 - 2276 - 2277 - 2278 - 2279 - 2280 - 2281 - 2282 - 2283 - 2284 - 2285 - 2286 - 2287 - 2288 - 2289 - 2290 - 2291 - 2292 - 2293 - 2294 - 2295 - 2296 - 2297 - 2298 - 2299 - 2300 - 2301 - 2302 - 2303 - 2304 - 2305 - 2306 - 2307 - 2308 - 2309 - 2310 - 2311 - 2312 - 2313 - 2314 - 2315 - 2316 - 2317 - 2318 - 2319 - 2320 - 2321 - 2322 - 2323 - 2324 - 2325 - 2326 - 2327 - 2328 - 2329 - 2330 - 2331 - 2332 - 2333 - 2334 - 2335 - 2336 - 2337 - 2338 - 2339 - 2340 - 2341 - 2342 - 2343 - 2344 - 2345 - 2346 - 2347 - 2348 - 2349 - 2350 - 2351 - 2352 - 2353 - 2354 - 2355 - 2356 - 2357 - 2358 - 2359 - 2360 - 2361 - 2362 - 2363 - 2364 - 2365 - 2366 - 2367 - 2368 - 2369 - 2370 - 2371 - 2372 - 2373 - 2374 - 2375 - 2376 - 2377 - 2378 - 2379 - 2380 - 2381 - 2382 - 2383 - 2384 - 2385 - 2386 - 2387 - 2388 - 2389 - 2390 - 2391 - 2392 - 2393 - 2394 - 2395 - 2396 - 2397 - 2398 - 2399 - 2400 - 2401 - 2402 - 2403 - 2404 - 2405 - 2406 - 2407 - 2408 - 2409 - 2410 - 2411 - 2412 - 2413 - 2414 - 2415 - 2416 - 2417 - 2418 - 2419 - 2420 - 2421 - 2422 - 2423 - 2424 - 2425 - 2426 - 2427 - 2428 - 2429 - 2430 - 2431 - 2432 - 2433 - 2434 - 2435 - 2436 - 2437 - 2438 - 2439 - 2440 - 2441 - 2442 - 2443 - 2444 - 2445 - 2446 - 2447 - 2448 - 2449 - 2450 - 2451 - 2452 - 2453 - 2454 - 2455 - 2456 - 2457 - 2458 - 2459 - 2460 - 2461 - 2462 - 2463 - 2464 - 2465 - 2466 - 2467 - 2468 - 2469 - 2470 - 2471 - 2472 - 2473 - 2474 - 2475 - 2476 - 2477 - 2478 - 2479 - 2480 - 2481 - 2482 - 2483 - 2484 - 2485 - 2486 - 2487 - 2488 - 2489 - 2490 - 2491 - 2492 - 2493 - 2494 - 2495 - 2496 - 2497 - 2498 - 2499 - 2500 - 2501 - 2502 - 2503 - 2504 - 2505 - 2506 - 2507 - 2508 - 2509 - 2510 - 2511 - 2512 - 2513 - 2514 - 2515 - 2516 - 2517 - 2518 - 2519 - 2520 - 2521 - 2522 - 2523 - 2524 - 2525 - 2526 - 2527 - 2528 - 2529 - 2530 - 2531 - 2532 - 2533 - 2534 - 2535 - 2536 - 2537 - 2538 - 2539 - 2540 - 2541 - 2542 - 2543 - 2544 - 2545 - 2546 - 2547 - 2548 - 2549 - 2550 - 2551 - 2552 - 2553 - 2554 - 2555 - 2556 - 2557 - 2558 - 2559 - 2560 - 2561 - 2562 - 2563 - 2564 - 2565 - 2566 - 2567 - 2568 - 2569 - 2570 - 2571 - 2572 - 2573 - 2574 - 2575 - 2576 - 2577 - 2578 - 2579 - 2580 - 2581 - 2582 - 2583 - 2584 - 2585 - 2586 - 2587 - 2588 - 2589 - 2590 - 2591 - 2592 - 2593 - 2594 - 2595 - 2596 - 2597 - 2598 - 2599 - 2600 - 2601 - 2602 - 2603 - 2604 - 2605 - 2606 - 2607 - 2608 - 2609 - 2610 - 2611 - 2612 - 2613 - 2614 - 2615 - 2616 - 2617 - 2618 - 2619 - 2620 - 2621 - 2622 - 2623 - 2624 - 2625 - 2626 - 2627 - 2628 - 2629 - 2630 - 2631 - 2632 - 2633 - 2634 - 2635 - 2636 - 2637 - 2638 - 2639 - 2640 - 2641 - 2642 - 2643 - 2644 - 2645 - 2646 - 2647 - 2648 - 2649 - 2650 - 2651 - 2652 - 2653 - 2654 - 2655 - 2656 - 2657 - 2658 - 2659 - 2660 - 2661 - 2662 - 2663 - 2664 - 2665 - 2666 - 2667 - 2668 - 2669 - 2670 - 2671 - 2672 - 2673 - 2674 - 2675 - 2676 - 2677 - 2678 - 2679 - 2680 - 2681 - 2682 - 2683 - 2684 - 2685 - 2686 - 2687 - 2688 - 2689 - 2690 - 2691 - 2692 - 2693 - 2694 - 2695 - 2696 - 2697 - 2698 - 2699 - 2700 - 2701 - 2702 - 2703 - 2704 - 2705 - 2706 - 2707 - 2708 - 2709 - 2710 - 2711 - 2712 - 2713 - 2714 - 2715 - 2716 - 2717 - 2718 - 2719 - 2720 - 2721 - 2722 - 2723 - 2724 - 2725 - 2726 - 2727 - 2728 - 2729 - 2730 - 2731 - 2732 - 2733 - 2734 - 2735 - 2736 - 2737 - 2738 - 2739 - 2740 - 2741 - 2742 - 2743 - 2744 - 2745 - 2746 - 2747 - 2748 - 2749 - 2750 - 2751 - 2752 - 2753 - 2754 - 2755 - 2756 - 2757 - 2758 - 2759 - 2760 - 2761 - 2762 - 2763 - 2764 - 2765 - 2766 - 2767 - 2768 - 2769 - 2770 - 2771 - 2772 - 2773 - 2774 - 2775 - 2776 - 2777 - 2778 - 2779 - 2780 - 2781 - 2782 - 2783 - 2784 - 2785 - 2786 - 2787 - 2788 - 2789 - 2790 - 2791 - 2792 - 2793 - 2794 - 2795 - 2796 - 2797 - 2798 - 2799 - 2800 - 2801 - 2802 - 2803 - 2804 - 2805 - 2806 - 2807 - 2808 - 2809 - 2810 - 2811 - 2812 - 2813 - 2814 - 2815 - 2816 - 2817 - 2818 - 2819 - 2820 - 2821 - 2822 - 2823 - 2824 - 2825 - 2826 - 2827 - 2828 - 2829 - 2830 - 2831 - 2832 - 2833 - 2834 - 2835 - 2836 - 2837 - 2838 - 2839 - 2840 - 2841 - 2842 - 2843 - 2844 - 2845 - 2846 - 2847 - 2848 - 2849 - 2850 - 2851 - 2852 - 2853 - 2854 - 2855 - 2856 - 2857 - 2858 - 2859 - 2860 - 2861 - 2862 - 2863 - 2864 - 2865 - 2866 - 2867 - 2868 - 2869 - 2870 - 2871 - 2872 - 2873 - 2874 - 2875 - 2876 - 2877 - 2878 - 2879 - 2880 - 2881 - 2882 - 2883 - 2884 - 2885 - 2886 - 2887 - 2888 - 2889 - 2890 - 2891 - 2892 - 2893 - 2894 - 2895 - 2896 - 2897 - 2898 - 2899 - 2900 - 2901 - 2902 - 2903 - 2904 - 2905 - 2906 - 2907 - 2908 - 2909 - 2910 - 2911 - 2912 - 2913 - 2914 - 2915 - 2916 - 2917 - 2918 - 2919 - 2920 - 2921 - 2922 - 2923 - 2924 - 2925 - 2926 - 2927 - 2928 - 2929 - 2930 - 2931 - 2932 - 2933 - 2934 - 2935 - 2936 - 2937 - 2938 - 2939 - 2940 - 2941 - 2942 - 2943 - 2944 - 2945 - 2946 - 2947 - 2948 - 2949 - 2950 - 2951 - 2952 - 2953 - 2954 - 2955 - 2956 - 2957 - 2958 - 2959 - 2960 - 2961 - 2962 - 2963 - 2964 - 2965 - 2966 - 2967 - 2968 - 2969 - 2970 - 2971 - 2972 - 2973 - 2974 - 2975 - 2976 - 2977 - 2978 - 2979 - 2980 - 2981 - 2982 - 2983 - 2984 - 2985 - 2986 - 2987 - 2988 - 2989 - 2990 - 2991 - 2992 - 2993 - 2994 - 2995 - 2996 - 2997 - 2998 - 2999 - 3000 - 3001 - 3002 - 3003 - 3004 - 3005 - 3006 - 3007 - 3008 - 3009 - 3010 - 3011 - 3012 - 3013 - 3014 - 3015 - 3016 - 3017 - 3018 - 3019 - 3020 - 3021 - 3022 - 3023 - 3024 - 3025 - 3026 - 3027 - 3028 - 3029 - 3030 - 3031 - 3032 - 3033 - 3034 - 3035 - 3036 - 3037 - 3038 - 3039 - 3040 - 3041 - 3042 - 3043 - 3044 - 3045 - 3046 - 3047 - 3048 - 3049 - 3050 - 3051 - 3052 - 3053 - 3054 - 3055 - 3056 - 3057 - 3058 - 3059 - 3060 - 3061 - 3062 - 3063 - 3064 - 3065 - 3066 - 3067 - 3068 - 3069 - 3070 - 3071 - 3072 - 3073 - 3074 - 3075 - 3076 - 3077 - 3078 - 3079 - 3080 - 3081 - 3082 - 3083 - 3084 - 3085 - 3086 - 3087 - 3088 - 3089 - 3090 - 3091 - 3092 - 3093 - 3094 - 3095 - 3096 - 3097 - 3098 - 3099 - 3100 - 3101 - 3102 - 3103 - 3104 - 3105 - 3106 - 3107 - 3108 - 3109 - 3110 - 3111 - 3112 - 3113 - 3114 - 3115 - 3116 - 3117 - 3118 - 3119 - 3120 - 3121 - 3122 - 3123 - 3124 - 3125 - 3126 - 3127 - 3128 - 3129 - 3130 - 3131 - 3132 - 3133 - 3134 - 3135 - 3136 - 3137 - 3138 - 3139 - 3140 - 3141 - 3142 - 3143 - 3144 - 3145 - 3146 - 3147 - 3148 - 3149 - 3150 - 3151 - 3152 - 3153 - 3154 - 3155 - 3156 - 3157 - 3158 - 3159 - 3160 - 3161 - 3162 - 3163 - 3164 - 3165 - 3166 - 3167 - 3168 - 3169 - 3170 - 3171 - 3172 - 3173 - 3174 - 3175 - 3176 - 3177 - 3178 - 3179 - 3180 - 3181 - 3182 - 3183 - 3184 - 3185 - 3186 - 3187 - 3188 - 3189 - 3190 - 3191 - 3192 - 3193 - 3194 - 3195 - 3196 - 3197 - 3198 - 3199 - 3200 - 3201 - 3202 - 3203 - 3204 - 3205 - 3206 - 3207 - 3208 - 3209 - 3210 - 3211 - 3212 - 3213 - 3214 - 3215 - 3216 - 3217 - 3218 - 3219 - 3220 - 3221 - 3222 - 3223 - 3224 - 3225 - 3226 - 3227 - 3228 - 3229 - 3230 - 3231 - 3232 - 3233 - 3234 - 3235 - 3236 - 3237 - 3238 - 3239 - 3240 - 3241 - 3242 - 3243 - 3244 - 3245 - 3246 - 3247 - 3248 - 3249 - 3250 - 3251 - 3252 - 3253 - 3254 - 3255 - 3256 - 3257 - 3258 - 3259 - 3260 - 3261 - 3262 - 3263 - 3264 - 3265 - 3266 - 3267 - 3268 - 3269 - 3270 - 3271 - 3272 - 3273 - 3274 - 3275 - 3276 - 3277 - 3278 - 3279 - 3280 - 3281 - 3282 - 3283 - 3284 - 3285 - 3286 - 3287 - 3288 - 3289 - 3290 - 3291 - 3292 - 3293 - 3294 - 3295 - 3296 - 3297 - 3298 - 3299 - 3300 - 3301 - 3302 - 3303 - 3304 - 3305 - 3306 - 3307 - 3308 - 3309 - 3310 - 3311 - 3312 - 3313 - 3314 - 3315 - 3316 - 3317 - 3318 - 3319 - 3320 - 3321 - 3322 - 3323 - 3324 - 3325 - 3326 - 3327 - 3328 - 3329 - 3330 - 3331 - 3332 - 3333 - 3334 - 3335 - 3336 - 3337 - 3338 - 3339 - 3340 - 3341 - 3342 - 3343 - 3344 - 3345 - 3346 - 3347 - 3348 - 3349 - 3350 - 3351 - 3352 - 3353 - 3354 - 3355 - 3356 - 3357 - 3358 - 3359 - 3360 - 3361 - 3362 - 3363 - 3364 - 3365 - 3366 - 3367 - 3368 - 3369 - 3370 - 3371 - 3372 - 3373 - 3374 - 3375 - 3376 - 3377 - 3378 - 3379 - 3380 - 3381 - 3382 - 3383 - 3384 - 3385 - 3386 - 3387 - 3388 - 3389 - 3390 - 3391 - 3392 - 3393 - 3394 - 3395 - 3396 - 3397 - 3398 - 3399 - 3400 - 3401 - 3402 - 3403 - 3404 - 3405 - 3406 - 3407 - 3408 - 3409 - 3410 - 3411 - 3412 - 3413 - 3414 - 3415 - 3416 - 3417 - 3418 - 3419 - 3420 - 3421 - 3422 - 3423 - 3424 - 3425 - 3426 - 3427 - 3428 - 3429 - 3430 - 3431 - 3432 - 3433 - 3434 - 3435 - 3436 - 3437 - 3438 - 3439 - 3440 - 3441 - 3442 - 3443 - 3444 - 3445 - 3446 - 3447 - 3448 - 3449 - 3450 - 3451 - 3452 - 3453 - 3454 - 3455 - 3456 - 3457 - 3458 - 3459 - 3460 - 3461 - 3462 - 3463 - 3464 - 3465 - 3466 - 3467 - 3468 - 3469 - 3470 - 3471 - 3472 - 3473 - 3474 - 3475 - 3476 - 3477 - 3478 - 3479 - 3480 - 3481 - 3482 - 3483 - 3484 - 3485 - 3486 - 3487 - 3488 - 3489 - 3490 - 3491 - 3492 - 3493 - 3494 - 3495 - 3496 - 3497 - 3498 - 3499 - 3500 - 3501 - 3502 - 3503 - 3504 - 3505 - 3506 - 3507 - 3508 - 3509 - 3510 - 3511 - 3512 - 3513 - 3514 - 3515 - 3516 - 3517 - 3518 - 3519 - 3520 - 3521 - 3522 - 3523 - 3524 - 3525 - 3526 - 3527 - 3528 - 3529 - 3530 - 3531 - 3532 - 3533 - 3534 - 3535 - 3536 - 3537 - 3538 - 3539 - 3540 - 3541 - 3542 - 3543 - 3544 - 3545 - 3546 - 3547 - 3548 - 3549 - 3550 - 3551 - 3552 - 3553 - 3554 - 3555 - 3556 - 3557 - 3558 - 3559 - 3560 - 3561 - 3562 - 3563 - 3564 - 3565 - 3566 - 3567 - 3568 - 3569 - 3570 - 3571 - 3572 - 3573 - 3574 - 3575 - 3576 - 3577 - 3578 - 3579 - 3580 - 3581 - 3582 - 3583 - 3584 - 3585 - 3586 - 3587 - 3588 - 3589 - 3590 - 3591 - 3592 - 3593 - 3594 - 3595 - 3596 - 3597 - 3598 - 3599 - 3600 - 3601 - 3602 - 3603 - 3604 - 3605 - 3606 - 3607 - 3608 - 3609 - 3610 - 3611 - 3612 - 3613 - 3614 - 3615 - 3616 - 3617 - 3618 - 3619 - 3620 - 3621 - 3622 - 3623 - 3624 - 3625 - 3626 - 3627 - 3628 - 3629 - 3630 - 3631 - 3632 - 3633 - 3634 - 3635 - 3636 - 3637 - 3638 - 3639 - 3640 - 3641 - 3642 - 3643 - 3644 - 3645 - 3646 - 3647 - 3648 - 3649 - 3650 - 3651 - 3652 - 3653 - 3654 - 3655 - 3656 - 3657 - 3658 - 3659 - 3660 - 3661 - 3662 - 3663 - 3664 - 3665 - 3666 - 3667 - 3668 - 3669 - 3670 - 3671 - 3672 - 3673 - 3674 - 3675 - 3676 - 3677 - 3678 - 3679 - 3680 - 3681 - 3682 - 3683 - 3684 - 3685 - 3686 - 3687 - 3688 - 3689 - 3690 - 3691 - 3692 - 3693 - 3694 - 3695 - 3696 - 3697 - 3698 - 3699 - 3700 - 3701 - 3702 - 3703 - 3704 - 3705 - 3706 - 3707 - 3708 - 3709 - 3710 - 3711 - 3712 - 3713 - 3714 - 3715 - 3716 - 3717 - 3718 - 3719 - 3720 - 3721 - 3722 - 3723 - 3724 - 3725 - 3726 - 3727 - 3728 - 3729 - 3730 - 3731 - 3732 - 3733 - 3734 - 3735 - 3736 - 3737 - 3738 - 3739 - 3740 - 3741 - 3742 - 3743 - 3744 - 3745 - 3746 - 3747 - 3748 - 3749 - 3750 - 3751 - 3752 - 3753 - 3754 - 3755 - 3756 - 3757 - 3758 - 3759 - 3760 - 3761 - 3762 - 3763 - 3764 - 3765 - 3766 - 3767 - 3768 - 3769 - 3770 - 3771 - 3772 - 3773 - 3774 - 3775 - 3776 - 3777 - 3778 - 3779 - 3780 - 3781 - 3782 - 3783 - 3784 - 3785 - 3786 - 3787 - 3788 - 3789



June 30, 1983

practice in the Alps of Europe. Although the climate is different in Eastern Oregon, the benefits of deferred grazing should be worth pursuing.

Thank you for this opportunity to express our views.

Very truly yours,

*F. J. Oberlander*  
F. J. Oberlander, Chairman  
Nazama Conservation Committee

po

10-1

Mr Pearl Parker, District Manager

Subject: Southern Malheur Environmental Impact Statement

1. I disagree that water quality problems are associated with livestock grazing to any great extent in E.I.S. area. The major cause of low water quality is temperature. The major cause of sediment in the lower reaches of Malheur and Owyhee rivers are row crop irrigation. The high coliform counts were in the lower reaches of said rivers also out of E.I.S. area.
2. Wild Horses: I would like to see alternative four used for wild horses.
3. Freezeout Sum Res. #415 was put in with funds from the Dry-creek Livestock Association and should not be fenced, as it was a major water hole during the drought's of 1966 and 1977.
4. Basically alternative three is pretty well balanced for different uses. But I would like to see 65% utilization used as a maximum in seedings # 403 (Sand Hollow) and 60% as a maximum in Freezeout. #405, as it is very rocky and soils are heavy and not very erosive. I think pasture # 401 should be utilized 50%. I agree with 50% on pastures #403, 404, 408, and pasture #410. Drycreek is part of both #408 and #405. Pasture #410 should remain part of #408 and #405 if fenced separate, it would be a nightmare to maintain. Livestock use patterns are already protecting Drycreek to a great extent.

John Bishop Member of  
Grazing Advisory Board  
Malheur Use Council  
Malheur County Water Quality  
Committee

Response to Comment Letter 9

9-1 See text changes page 9, Table 1-2.



June 24, 1983

Mr. Pearl M. Parker  
Vale District Manager  
Bureau of Land Management  
P.O. Box 700  
100 East Oregon Street  
Vale, Oregon 97918

RE: Comment on the Draft "Southern Malheur Grazing Management Program" Environmental Impact Statement

Dear Mr. Parker:

I greatly appreciate this opportunity for public comment on the Draft "Southern Malheur Grazing Management Program" E.I.S. which was recently prepared by your office. The E.I.S. preparation team is to be complimented upon the high quality of their product, the excellent documentation provided the reviewer through the useful tabular summaries making visualization of impacts easy for the reader, and for the thorough discussion and presentation of the mechanics of range manipulation under the five Alternatives. This is one of the best Grazing Environmental Impact Statements I have seen, and I found the economic analyses of particular interest. There are a number of issues upon which I provide comments reflecting differences in resource management emphasis and viewpoint, rather than criticism of the quality of this fine work.

First of all, I am pleased with a number of the products your Alternatives would yield, although I disagree with your Alternative designs. The protection of ACEOs from grazing impacts in all of your Alternatives is good, and it is a step in the right direction to only consider alternatives which would improve range and forage conditions.

The Alternative designs in the Draft E.I.S. are not legally adequate for NEPA compliance, as well as modern range law, for several reasons. Lack of provision for alternative wildlife AUM allocations under your proposed Alternatives violates NEPA and FLPMA mandate that this natural resource element have reflective levels of AUM allocation, just as livestock or wild horses AUM allocations vary under each Alternative. Wildlife AUM allocation (5,296 AUMs for each Alt.) appears to be de facto. That is, it is clear that wildlife is viewed as a static resource in your Draft document and on the basis of the known populations at present, only enough AUMs are allocated to sustain that population level. In a sense this is the reverse of your livestock allocation process, since wildlife, with the exception of a few herds, is considered as being spread across the entire resource base, while your livestock allocations are focused on use areas. As you can see from the attached tables, despite major differences in alternative forage production levels, wildlife AUM allocations vary between 1.1 and 1.6% of available AUMs; similarly, your long-term wildlife AUM plans are all the same (5,296 AUMs for all Alts.). Failure to provide a range of population sizes for wildlife resource AUM assignment not only violates NEPA, but also the FLPMA, whose multiple use mandate must have compliance in a NEPA context through the E.I.S. Alternatives. Wildlife obviously exists in the cracks between livestock allocations under this scheme, and you propose no management of wildlife at all. Your document is deficient without full discussion of wildlife carrying capacities under a range of livestock, wild horse, and wildlife allocation levels - including exclusion of cattle from sites with the best wildlife potential.

Response to Comment Letter 10

10-1

We agree that water quality problems identified by the Oregon Department of Environmental Quality in the lower Malheur and Owyhee Rivers are probably not caused to any significant extent by livestock grazing on public lands, but are probably related mainly to farming practices and irrigation of row crop lands in the lower river valleys. However, livestock grazing does cause localized water quality problems on public lands where cattle congregate in riparian areas. Removal of riparian vegetation by livestock can result in increased water temperatures, accelerated streambank erosion and stream siltation. Livestock grazing along streams can also cause fecal contamination of water supplies.







The alternatives differ in three components: (1) the allocation of livestock forage (2) the types of grazing systems to be applied and (3) the kind and amount of range improvements to be constructed. Appendices B, C and D contain allotment-specific proposed allocations, grazing systems and range improvements respectively. Table 1-1 summarizes the components of the alternatives.

Table 1-1: Summary of Components

	1981 Level	ALT. 1 No Action	ALT. 2 Emphasize % Livestock	ALT. 3 Preferred Alternative	ALT. 4 Emphasize % Non-Livestock	ALT. 5 Emphasize % Wild Horses
Existing Forage Production (AUMs) <sup>1</sup>	462,249	462,249	462,249	462,249	462,249	462,249
Maximum Allowable Utilization (%) <sup>2</sup>	—	—	65/60	65/50	50/40	50/40
Initial Allocation (AUMs)	5,296	5,296	5,296	5,296	5,296	5,296
Wild Horses	16,380	16,380	10,800	13,200	7,200	43,993
Nonconsumptive	18,372	120,227	2,050	32,733	104,094	43,993
Livestock	313,021	320,346	444,103	411,020	345,659	292,369
Long Term Forage Production (AUMs)	462,249	546,620	532,475	501,295	501,295	501,295
Long Term Allocation (AUMs)						
Wildlife	5,296	5,296	5,296	5,296	5,296	5,296
Wild Horses	16,380	16,380	10,800	13,200	7,200	43,993
Nonconsumptive	18,372	120,227	2,050	32,733	104,094	43,993
Livestock	320,346	320,346	527,474	481,249	384,705	331,415
Grazing Systems (acres) <sup>3</sup>						
Winter	561,003	561,003	378,058	368,218	370,754	152,484
Early Spring	315,489	315,489	266,067	266,067	266,067	159,834
Spring/Summer	458,503	458,503	400,825	392,765	441,204	407,935
Spring/Fall	556,693	556,693	92,597	92,597	85,216	82,981
Deferred	237,029	237,029	236,768	140,571	216,042	202,402
Deferred Rotation	1,782,677	1,782,677	2,080,055	2,171,222	2,021,225	1,571,751
Rest Rotation	544,077	544,077	338,272	400,211	377,073	389,784
Exclusion	8,400	8,400	8,400	8,478	82,883	89,784
Fenced Federal Range	50,345	50,345	50,345	50,345	50,345	50,345
Unallotted	63,629	63,629	63,629	63,629	63,629	63,629
Unavailable <sup>4</sup>	17,812	17,812	17,812	17,812	17,812	17,812
Utilization (%)						
Winter	2,087	0	238	123	188	188
Early Spring	295	0	72	66	0	1
Spring/Summer	477	0	122	26	0	0
Spring/Fall	690	0	15	4	0	0
Deferred	93	0	203	148	0	27
Deferred Rotation	333,568	0	116,779	34,695	0	0
Rest Rotation	210,919	0	235,004	79,361	0	0
Exclusion	—	—	6,845	2,540	376	648
Fenced Federal Range	—	—	6,486	4,686	—	—
Unallotted	—	—	0.95	1.84	—	—
Unavailable <sup>4</sup>	—	—	7.6%	14.7%	—	—

(1) Existing forage production is based on the maximum allowable utilization levels of Alternative 2. This is the total amount of forage which

can be sustained by livestock on a sustainable basis.

(2) Percent utilization and range (seedling/vegetative). Utilization maximums are not applicable to Alternative 1.

(3) Livestock allocations for the 1981 active preference (630,346 AUMs). For the purpose of analysis, the long

term allocation shown is the same as the initial allocation.

(4) Existing grazing systems are the same as Alternative 1. No Action.

(5) Areas within allotments which are not used by livestock due to a lack of water, livestock management fences, topography or low productivity

are excluded from the analysis. A final benefit/cost analysis will be conducted prior to the decision and the results published in the Rangeland

Program Summary.

(6) Benefit/cost analyses were not conducted for Alternatives 4 and 5 because the level of investment is comparatively small and the monetary

value of the benefits derived from the Alternative 4 and 5 investments cannot be reliably determined.

(7) Initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

and initial allocation of forage

Dear Mr. Husband:

I thought you would be interested in seeing my revisions of the RMP Alternatives:  
**ALTERNATIVE 1**

Continue the on-going process of reviewing present management levels and resource uses to keep them in line with true public interest stewardship, as reflected in the following conceptual guidelines:

- Public interest resource management must favor
- protection of fragile resources
- preservation of natural and cultural resources
- non-commodity resource production
- non-consumptive resource uses

Limitation and constraint of production oriented resource uses which detract from preservation oriented uses are obviously necessary to protect the broader public's resource base. This should not be interpreted to mean no production oriented uses, but simply that the course of least consequences be followed to assure the long-term survival and protection of the public domain as a resource base, especially guarding fragile, natural, and cultural resources.

Resource uses which must be favored to comply with the public interest mandate under this Alternative include, but are not limited to:

- Management of isolated tracts for wildlife habitat.
- Retention of public lands in federal ownership.
- Habitat management to increase wildlife populations.
- Cultural resources protection (cultural resources must be completely protected in all Alternatives).
- Protection of wilderness qualities (wilderness qualities must be completely preserved under all Alternatives).
- Protection of sites with candidate or designated threatened or endangered species, and rare plant or animal communities (these sites should be protected under all Alternatives).
- Protection of all candidate or designated ACECs, National Natural Landmarks, National-wide Rivers Inventory sites (National Park Service), "Important Fish and Wildlife Habitats in Idaho" localities (USFWS), and rimlands overlooking any of these categories whose use for other purposes might degrade the value of these categories of habitats (these sites should be protected under all Alternatives).
- Protection of riparian and native grassland habitats, favoring wildlife over secondary uses such as grazing at these special resource sites. (Native grassland shouldn't be available for grazing.)
- Opportunities for general dispersed recreation.

In compliance with modern range management law and the FIPMA, all special interest or private beneficiary uses must be recognized as secondary to any and all potential broader public use. This conceptual framework in no way denies multiple use of the public domain; it is merely a common sense approach to managing federal land to the benefit of the larger public by taking a conservative view of consumptive and commodity use while affording protection to limited and fragile resources. As the "No Action" Alternative, this should be the goal toward which present management strives.

## ALTERNATIVE 2

This Alternative allows maximum commodity resources production, consumptive resource uses, and commercial use authorization that is possible without in any way jeopardizing Alternative 1.

Without compromising any aspect of Alternative 1, manage to allow maximum

- commodity resources production
- consumptive resource use
- commercial use authorization

While the limitations and constraints for preservation oriented resource uses, as described in Alternative 1, may never be compromised or minimized, this Alternative would allow an emphasis to be placed upon allocating as many other uses as is possible without damaging or degrading the resource, or conflicting with Alternative 1 protection of delicate or limited habitats.

\* % indicates the percentage of each user category's AUMs of the forage AUMs allocatable under each alternative. Nonconsumptive AUMs are not included in this figure. 4



Maximum resource use possible without habitat degradation would be allowed in the following categories, and others:

- Livestock stocking levels and more range improvements would be allowed to a point at which a parity with wildlife AUMs is reached. Wildlife AUM usage would still be recognized as higher public benefit use, but grazing AUMs could be allocated up to the point at which they detract from wildlife carrying capacities. In many areas of non-native grassland grazing AUMs might more than equal wildlife AUMs. The raising of any grazing AUM level would be after an F.I.S. Establishment of mineral material sites for sand, gravel, and so forth, would be allowed after the preparation and review of a NEPA-guided Environmental Impact Statement at each site, since any activity of this nature on public domain comprises a major federal action significantly affecting the human environment.
- Mineral leasing (oil, gas, geothermal), similarly could be permitted at sites excluded from Alternative 1 protection after the preparation of a NEPA-complying Environmental Impact Statement.
- Off-road vehicle use could be allowed in limited sites after the preparation of a NEPA process Environmental Impact Statement.

Other resource uses, as well, could be allowed under this Alternative, however, the above types of resource exploitation would be favored over others in the sites allowed by and to the degree defined by Alternative 1. (Land disposal for agricultural entry and the transfer of land out of federal ownership cannot be included in the RMP until a complete NEPA-complying Environmental Impact Statement has been prepared, since previous inventory has determined the amount of land to be considered in the next five years. The magnitude of this proposal requires EIS treatment outside the RMP process. After EIS treatment these uses could be later added to the RMP under this Alternative.)

### ALTERNATIVE 3

Make an honest effort to design trade-offs between competing resource uses allowed under Alternative 1 to best address the issues and resolve conflicts.

This Alternative would not necessarily be a compromise or average between Alternatives 2 and Alternative 4. For a given resource on a site by site approach, a level of use weighted more toward Alt. 2 or Alt. 4 may better address the issue and balance of conflicts between the competing uses allowed under framework of Alt. 1 options.

This Alternative can be thought of as a "best shot" at allowing production and mitigation-ecological restoration/optimization uses, while resolving conflicts that occur.

### ALTERNATIVE 4

This Alternative emphasizes an up-grading of the public domain lands through management toward maximum ecological restoration and condition, mitigation and obliteration of the marks of man, and the exclusion of many commodity and consumptive resource uses. This Alt. goes well beyond the static preservation proposed by Alt. 1, and attempts to manage toward the maximum ecological and general public non-commodity resource production and non-consumptive resource use potentials.

- In addition to the status quo protections of Alt. 1, this Alternative management favors
- protection of additional categories of resources, including sites with high potential for wildlife enhancement or re-introduction
  - protection of naturalness and an attempt to maximize ecological condition on all public lands, with this potential having greater weight than secondary uses like grazing
  - maximize non-commodity resource production
  - maximize non-consumptive resource uses

This Alternative would severely limit, constrain, and often exclude production oriented resource uses that detract from the naturalness and ecological potential of the public domain.

- Resource uses favored under this Alternative include, but are not limited to:
- Management of all tracts for maximum wildlife potential and ecological potential
  - Re-introduction of species such as desert big-horn sheep, increase endangered species pop.

both through management and through enhancement or re-establishing populations throughout the historic range

- Maximize opportunities for general dispersed recreation, including making such "improvements" as trails in some areas

- Terminate the use of herbicidal vegetation control on all public domain lands, and initiate a seeding program using only native species, especially of grasses
- Deny for instream flow on all natural waterways passing through federal lands; deny any consideration of the construction of impoundments or diversionary structures on waterways in federal lands
- Recommend designation of all USA lands for wilderness, encourage local landowners to designate sites for designation, encourage RMP transfer of all lands to the BLM or state park system at candidate National Natural Landmarks, remove all the land for AOC's and manage them for wildlife maximization
- Survey all public domain land for areas in which wilderness character could be restored were the marks of man feasibly removed; manage these as AOC's after mitigation
- Limit access in certain areas, blocking many small, rarely used side-roads and oblitterating them
- Place restrictions upon ORV use, requiring that roads be adhered to in all but special ORV areas
- Allow grazing only in areas in which the native flora is largely eradicated and terminate grazing immediately if the ecological condition begins to decline
- Design a mitigation plan for improving large tracts and specific sites
- Manage all riparian habitat for wildlife maximization
- Dismantle range improvements which do not benefit wildlife (pipelines, etc.), or exclude cattle grazing from the improved area if wildlife could benefit from the improvement were cattle removed
- Evaluate the potential for "wildlife range improvements" to enhance wildlife populations (drinking tanks, and so forth)
- Expand the range of game species such as antelope to include areas from which they have been eliminated or are currently denied use of by other uses (re-introduction)

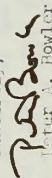
Other resource uses can occur in this Alternative, but management will be designed to maximize non-commodity resource production and non-consumptive resource uses. Special interest uses such as grazing would be limited and more closely monitored than under Alternative 1.

As you can see, I utilized a revised version of your Alt. 4 as the "No Action" Alternative (1), with its protective requirements holding for the other three Alts. Alt. 2 allows maximum resource exploitation possible under Alt. 1's protective guidelines, Alt. 3 is the compromise between 2 and 4, and the Alt. 4 I describe is based on maximum non-consumptive and non-commodity resource potential development.

I am forwarding a copy of this comment to Mr. Zimmer of the Boise District Office since I think it would have relevance to the Boise District RMP as well.

Thank you for your consideration. I look forward to continuing working with you on the RMP. Please include these comments in the RMP record.

Sincerely,

  
Peter A. Howler

cc. Mr. Martin J. Zimmer, Boise District Office



June 28, 1983

Mr. Pearl Parker, District Manager  
P.O. Box 700  
103 East Oregon St.  
Vale, Oregon 97918

Dear Mr. Parker,

It is a pleasure for me to extend you and your staff on the excellent manner in which the EIS for Southern Malheur (Vale District) was prepared. It is positive in almost every aspect, whether it be viewed from the viewpoint of resource, livestock, recreation, wildlife, wild horse, or whatever interest. It is indicative of the degree of cooperation that has existed for some time now between the BLM and various interests groups in the Vale District, even though all of us do not see eye to eye on the solution to our problems.

The preferred alternative (No. 3) is basically very good I believe, as it generally indicates improvement of all resource values. Alternatives 1, 2, 4, and 5 do not indicate improvement in all areas and do not necessarily present a balanced program.

There are some questions that arise as I review the portions with which I am familiar and I ask your consideration on them.

On page 19 under Water Quality, the second paragraph seems to imply that water quality problems are associated with livestock grazing only. The report referred to (Malheur Co. 1976) would seem to indicate something else to me. The poor quality water was at the lower sections of river drainage rather than in the upper reaches of the streams where grazing occurs.

Again, on page 46 under Water Quality, reference is again made to grazing and water quality. The statement could easily be taken out of context and interpreted to mean that all fecal coliform pollution is a direct result of livestock grazing, when the Malheur County report of 1976 would indicate that this form of contamination occurs mainly in the lower more densely populated areas of the county.

Also of concern to me is the classification of pastures as either seeding or native strictly on an acreage basis. Acreage should not be the only determining factor because of the different utilization rates allowed on the various classifications of range.

- 1 -

# Response to Comment Letter 11

11-1 Wildlife allocations were based on herd use areas and seasons of use as identified by ODFW and Bureau specialists. Wildlife allocations include only those AUMs which are in competition between big game and livestock. Non-consumptive allocations provide vegetation for small game and non-game wildlife forage and habitat requirements as well as soil protection and plant vigor. Also see response to comments 5-4 and 8-3.

11-2 When ranch properties and associated grazing permits are sold, the grazing preference selling price is estimated to be \$45 per AUM. The 1983 private grazing land lease rate used in calculating the settlement for unauthorized grazing use is \$8.83 per AUM. The Bureau of Land Management charged permittees \$1.40 per AUM in 1983. The grazing fee is based on a formula contained in the Public Rangeland and Improvement Act of 1978 (43 USC 1901). Ranch budget data was not collected for this EIS area. The Ironside grazing EIS, which covers the northern portion of the Vale District, has published ranch budget data which is applicable to this area.

11-3 No quantitative analysis has been done to answer this question: however, if the entire EIS area was in late ecological condition, it is expected that increases in coldwater fishing and small and upland game hunting would occur. Big game hunting would decrease. No significant change in camping, day use, warmwater fishing, or waterfowl use would be expected to occur.

11-4 See response to comments 5-4 and 8-3. The primary difference between the example alternative and the EIS alternatives is in the allocation for wildlife. Otherwise, the example alternative is within the range of alternatives as analyzed in the Draft EIS.



June 27, 1983

Mr. Fearl M. Parker  
P.O. Box 700  
Vale, Oregon 97918

Dear Mr. Parker,

As BLM permit holders, we would like to offer some input in regards to your EIS for the Southern Malheur Grazing Program. After studying the draft and attending the meeting, we are still convinced that alternatives number 1 and 2 are the best choices. The livestock are not the problem in the creek bottoms. The water must be controlled before any of the conditions of concern can be corrected. Even with the waters controlled, the ground that used to support rich growth along the creek beds cannot be replaced. At this time we feel it would be a mistake to favor the other plans.

Sincerely,

In the proposed range improvement program, I feel it important to take into consideration the original purpose and source of finance for construction before changing or altering conditions or uses of presently existing reservoirs, springs, or other improvements.

Because of the extreme damage to the range resource by wild horses, it would only seem logical to me to keep their numbers to the very lowest level possible, to accommodate those people who feel we should maintain a wild horse herd in this area.

Yours truly,

Robert H. Skinner

Response to Comment Letter 12

12-1 See response to comment 10-1.



LAW OFFICES  
**BARRETT, HANNA, DALY & CASPAR**

SUITE 100

2555 M STREET, N.W.

WASHINGTON, D. C. 20037

(202) 293-3204  
 TELEX 90-4058 HCLAW WASH  
 FRANKFURT, GERMANY OFFICE  
 6 FRANKFURT AM MAIN  
 AM SALZHAUS 4  
 WEST GERMANY  
 (0611) 281647/48

June 30, 1983

RAY L. HANNA  
 FRED H. DALY  
 RUSSELL J. BARRETT  
 ROBERT L. OSWALD  
 JOHN H. MONTGOMERY  
 ROGER V. BARTH  
 JOSEPH E. SCHULER  
 NANCY A. MURRAY

OF COUNSEL

MARIO T. NOTO  
 EDWARD J. BELLEN  
 FRANKFURT, WEST GERMANY

Fearl M. Parker  
 Vale District Manager  
 P.O. Box 700  
 100 East Oregon Street  
 Vale, Oregon 97918

re: Southern Malheur Grazing  
 Management Draft EIS

Dear Mr. Parker:

I am writing on behalf of the American Horse Protection Association, Inc., to comment on the Southern Malheur Draft EIS.

Unfortunately, the array of alternatives analyzed in the draft is not particularly enlightening regarding wild horse management. With the exception of the No Action alternative (which is normally included in the draft only for purposes of comparison), all of the alternatives but one call for appreciable reductions in the 1982 wild horse population. Alternative 5 (Emphasize Wild Horses) does analyze the effects of an increase in the wild horse forage allocation, but that increase is so large (240 percent of existing use) that it seems designed to make the alternative unacceptable on its face.

The range conditions in Southern Malheur do not justify structuring alternatives in this manner. Range trend is static or upward on 91 percent of the unit, and range condition is in the late or middle range in 80 percent of the unit. Compared to many areas of the public lands, therefore, the unit is in good condition and has real potential for an increase in grazing use.

Fearl M. Parker  
 June 30, 1983  
 Page 2

Wild horse use in the unit is minor. The current population consumes only four percent of existing forage production (18,372 of 462,249 AUMs), while livestock consumption is 68 percent of the total. The preponderance of forage allocated to livestock increases immediately and dramatically under the Preferred Alternative: livestock are allocated another 98,000 AUMs, increasing their share of existing production to 89 percent, while wild horse forage is cut by 5,172 AUMs (28 percent of existing consumption). Over the long term, an additional 70,266 AUMs will be produced due to changes in grazing management practices; all of it is allocated to livestock, at least for the purposes of analysis.

Under the Preferred Alternative, wild horses will be removed entirely from three existing herd areas (Basque, Cottonwood Creek and Potholes). The draft states that this will be done because "no introduction of unrelated brood stock" would occur in these areas, which (the draft contends) means that their current populations are too small to be "viable." However, it is not immediately clear why this is true. The three areas are in reasonably close proximity, and the draft does not contemplate construction of fences or other barriers that would inhibit movement of animals between the areas. Furthermore, the preferred alternative contemplates reducing the size of two herd areas (Three Fingers and Jackies Butte), without explanation.

The most important issue, however, is how the Preferred Alternative can justify a 98,000-AUM (31-percent) increase in the livestock forage allocation, but nevertheless require a 28-percent reduction in wild horse forage. No explanation for this illogical decision appears in the draft. It seems incredible to AHPA that an alternative could not have been developed using the existing wild horse population as its starting point, and permitting an increase in that number over the long term as forage conditions improved as a result of improved grazing practices. Given the fact that wild horse forage consumption is such a small portion of total forage production, such an alternative certainly would not be unworkable, nor would it prevent the attainment of other range management goals. At the same time, it would provide an opportunity to analyze the impacts of a reasonable, middle-ground course of wild horse management.

AHPA has frequently commented on BLM's failure to include an alternative of this type in its grazing EISs; the Association

14-3

14-2


14-1



Fearl M. Parker  
June 30, 1983  
page 3

believes that the failure to do so is in conflict with the National Environmental Police Act and the Wild, Free-Roaming Horses and Burros Act. Accordingly, AHPA urges that the draft be rewritten to include analysis of an alternative of the type described in this letter.

14-3

  
Russell J. Gaspar  
General Counsel  
American Horse Protection  
Association, Inc.

cc: Joan R. Blue  
RJG:bb

Response to Comment Letter 14

14-1

No movement of horses between the Basque, Cottonwood Creek or Potholes herd areas occur because of the presence of fences on public and private lands.

The size of the Three Fingers herd area was proposed for reduction in the preferred alternative because of multiple use conflicts, primarily riparian management needs. The Jackies Butte herd would be confined to the Dry Creek Pasture within the Jackies Butte unit. This pasture is large enough (65,000 acres) to allow the maintenance of a thriving ecological balance and a population of healthy animals. It also allows maintenance of an intensive livestock management program on the balance of fenced pastures within the Jackies Butte unit without resource conflict between wild horses and domestic livestock.

14-2

First, most of the increase allocated to livestock would occur outside the herd areas. Second, the allocations for livestock and wild horses are consistent with the objectives of Alternative 3. Public comment on the selection of a Preferred Alternative supported a wild horse population level no higher than minimum viable herd size. Other alternatives are constructed to satisfy a different combination of objectives; therefore, for each alternative a different mix of allocations is proposed.

14-3

It would have been possible to design and analyze such an alternative. It was not suggested, however, during the public scoping process. Alternative 5 allows the existing wild horse population to grow within the limits of the grazing and water capacity of the herd management areas. The decision may blend features from Alternative 5 with any other alternative. Also, the decision will make no long-term forage allocation, leaving that for a future process.

The range of alternatives analyzed in the EIS are consistent with the procedural requirements of NEPA. During the scoping process, which included 5 public meetings and a 60 day period in which to submit written comments, the BLM received one letter in which requested analysis of horse population levels higher than the minimum viable herd levels. Alternative 5 allocates sufficient forage to provide for a population of horses which is higher than minimum viable levels and higher than existing levels.





## AUDUBON SOCIETY OF PORTLAND

*A Branch of National Audubon Society*

PHONE 292-6855 • 5151 NORTHWEST CORNELL ROAD • PORTLAND, OREGON 97210

June 30, 1983

Mr. Fearl Parker  
District Manager  
P. O. Box 700  
100 East Oregon Street  
Vale, Oregon 97918

Re: Southern Malheur Grazing EIS

Dear Mr. Parker:

We appreciate the opportunity to review the alternative livestock management programs you are considering. We have read the EIS from the perspective of our goals for eastern Oregon, which are to improve the condition of wildlife habitat, native rangelands, soil and water resources. We have chosen the Trout Creek Mountains as an area to receive our special attention for wilderness designation, and we have also looked for how the alternatives would affect the Trout Creeks.

We have prepared our comments in three sections: first, we have grouped those comments which are recommendations on how livestock grazing should be managed; second, we have commented on the adequacy of the EIS document; and third, we have made some specific comments on the Trout Creeks.

### I. Our Recommendations for Livestock Grazing Management

- a. The Introduction to Chapter 3 says that environmental consequences are compared to existing conditions. In some cases, existing conditions are in need of a great deal of improvement. For example, of 253 miles of fish habitat, 213 miles are in poor or fair condition (p. 20). We would urge you to remember that existing may not be desirable, and that no change from poor is not a good result.
- b. We are extremely concerned with the predicted condition of riparian and fish habitat in the preferred alternative. For example, Table 3-6, p. 48, shows that the number of miles of riparian areas judged poor will increase from 15 to 71. Page 50 tells us that 50 miles of trout habitat will deteriorate. We think that impact is unacceptable and incompatible with the Bureau's charge to "improve or maintain."
- c. The EIS states that large seedings usually have low habitat diversity (p. 19). We recognize that seedings may allow recovery of nearby native range which can be deferred (p. 81), but we prefer that you do no seeding and reduce livestock AUMs instead where native range should be allowed to recover.

15-1

-2-

d. In fact, we are concerned by the planned increase in livestock AUMs in all alternatives except 5. We do not believe that native range conditions can improve with heavier livestock use, and the EIS does not convince us otherwise.

e. We prefer that you do no spraying of 2.4-D because the potential harmful effects on the food chain have not been adequately studied. Would a separate EIS be done before spraying is done? This EIS does not address the potential impacts of the spraying. You should consider a worst case analysis for adverse impacts on wildlife and plants before doing any spraying. The recent experience in the Blue Mountains demonstrates that planned protection of riparian areas may not be realized.

15-2

f. We do not agree that all alternatives are consistent with LCDC goals 5 and 6 (last line p. 12). Table 1-4 on the same page presents some of the goal conflicts and p. 52 gives more details on the degradation of riparian and fisheries habitat which will result from alternatives 1, 2, and some-times 3.

15-3

g. We believe you should do inventories and monitoring of threatened and endangered plants where you do not know how grazing plans will affect these (p. 44). We also believe that you should plan to gather wildlife data which you feel are incomplete (for example, sagegrouse strutting grounds, p. 25).

15-4

h. The EIS does not summarize how the alternatives treat early condition range. We believe that range in early condition should be allowed to recover (p. 42).

i. We urge excluding additional reservoirs from livestock for protection of water-associated birds (p. 50).

### II. Comments on the Adequacy of the EIS

We think the EIS is hard to use and have three major criticisms. We've cited some examples to clarify what we mean.

1. It presents inadequate support for major assumptions and conclusions. It is difficult to know which conclusions are based on monitoring that you have done and which are based on review of the literature.
2. Data and statements which appear in Chapters 1 and 2 may not be mentioned again in Chapter 3 in the same form. The EIS would be easier to use if the same kind of data was presented in the same way in each chapter, or better, if the EIS combined the information in Chapters 2 and 3 so that the reader did not have to keep flipping back and forth.
3. In some cases, data in the EIS contradict conclusions in the EIS.

### Examples:

1. Inadequate Support
  - a. We are bothered by the statement that range conditions will improve under all alternatives, also that the proportion of residual ground cover

15-5

31



15-5 composed of perennial species will increase under all alternatives. We've read the support the EIS presents for these statements (pages 37-42 and Appendix E) but feel that this very major conclusion is one that the EIS needs to defend much more completely.

15-6 b. We realize that the scale in Figure 2-1 is very small, and that it is difficult to portray complex vegetation systems on such a map, but we are concerned about inaccuracies in the area we know best the Trout Creek WSAs. There is no juniper in the Trout Creeks, and mountain mahogany is much more widespread than the map indicates. The rim of Whitehorse Canyon at about 6400' (a large plateau) is grassland; there is no sagebrush. The upper portions of Antelope Creek have quite a lot of aspen, and the upper portions of Twelve-Mile Creek have excellent shrubby riparian vegetation. Were any conclusions drawn from inadequate vegetation data?

15-7 c. On page 17, the EIS says that the density and composition of riparian vegetation are at less than potential. We agree, and don't understand, then, why you have chosen to use a field key to whether riparian areas are improvable) which is based on existing vegetation.

## 2. Presentation

15-8 a. In some cases, the questions uppermost in our minds were either not answered by the EIS, or were presented only in raw data in the Appendix so that we would have had to compile results ourselves. For example, how many miles of streambank that you judge to be improvable will be improved under the various alternatives? Will livestock be excluded under alternative 4 from all improvable riparian areas? How are you treating range that you judge to be in late, middle or early condition? Management intent should be clearly described.

15-9 b. The EIS says that wildlife habitat is below potential in upland meadows because of heavy livestock use (p. 20), but it does not tell us how upland meadows will be treated under the various alternatives. The p. 20 statement seems to imply that you've identified conflicts between livestock and wildlife in upland meadows, but not addressed these conflicts in alternative 4.

15-12 c. Table 2-10, p. 30 lists Special Areas, but we can't find where we're told how the alternatives treat these areas.

## 3. Contradiction

15-13 a. The Summary states that "no change in water quantity will occur under any of the alternatives" (p. xii), but the EIS later states that under alternatives 4 and 5, and to a lesser extent in alternative 3, protection of riparian areas will result in longer flow duration and raise the water table (p. 45).

15-14 b. On page 53, impacts on recreation are discussed, and we read that fishery habitat will improve under alternatives 3, 4, and 5; but on page 52, we read that under alternative 3, 25 miles of stream will gradually or greatly improve, 54 miles will deteriorate. That does not sound like a

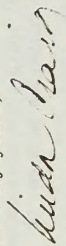
net improvement to us.

## III. Comments on the Trout Creeks and other WSAs

- a. We prefer that you do no seeding in WSAs anywhere (p. 56).
- b. We prefer that brush control be done only by fire instead of by spraying or mechanical means.
- c. We are not nearly as bothered by riparian fencing in the Trout Creeks as we are by deteriorating streams. We urge you to maximize protection of riparian areas and fish habitat.

Again, our thanks for the opportunity to respond to your plans. We appreciate your consideration of non-game wildlife species in the environmental analysis. Please send us the final EIS and your management plans as they are developed. I'd like to be on your mailing list to receive other planning materials and wilderness EIS's.

Sincerely yours,



Linda S. Craig  
for the Conservation Committee,  
Audubon Society of Portland

1615 N. W. 23rd, Suite 1  
Portland, Oregon 97210  
222-2606



Response to Comment Letter 15

- 15-1 See "Revision of the Preferred Alternative" section.
- 15-2 See text changes for pages 46, 50, and 55. Also see response to comment 8-9. A separate EIS prior to any spraying is not planned at this time, but an environmental assessment would be prepared prior to spraying to help determine if an EIS is needed.
- 15-3 See text change, page 12.
- 15-4 See response to comment 8-3.
- 15-5 The predicted changes in range condition are based on Allotment Management Plan evaluations using monitoring data (range trend, utilization, actual use and climate data). For example evaluations for Lucky 7, Gilbert, East and West Cow Creek and several other allotments show a trend toward late ecological condition as evidenced by increase of perennial key species within many pastures, as a result of the grazing management applied since the late 1960's.
- 15-6 No conclusions were drawn from the vegetation type map. Figure 2-1, of the Draft EIS is for graphic portrayal of major vegetative types. Considerable "lumping" of various plant communities took place in preparation of the map. Analysis during the EIS process was from inventory data mapped on 7.5 minute and 1/2" to the mile scale maps. Field inventories varied in intensity from site specific stream sections to general soil survey units.
- 15-7 The field key only uses physical properties of the site, e.g., persistence of water, gradient of stream, types of soil, etc., to predict site potential. The plants shown in boldface in the key are the species which would dominate the climax community of the site described. The differences between the potential and the existing vegetation determine the improvement potential.
- 15-8 Based on data presented in the revised Table 3-4 Soil Erosion (see text change, Table 3-4) miles of streambanks expected to improve over existing condition are:
- |           |           |            |            |            |
|-----------|-----------|------------|------------|------------|
| Alt. 1    | Alt. 2    | Alt. 3     | Alt. 4     | Alt. 5     |
| <u>52</u> | <u>52</u> | <u>131</u> | <u>158</u> | <u>158</u> |
- 15-9 Under Alternative 4, livestock would be excluded from all riparian areas with medium to high riparian improvement potential (see page 6 of the Draft EIS, Alternative 4, paragraph 5).
- 15-10 See Appendix C Table C-1 which displays existing ecological condition, proposed grazing systems, proposed utilization levels, and predicted trend for each pasture.

15-11 See response to Comment 5-11.

15-12 The impact of grazing management on special areas is discussed on page 55 of the Draft EIS.

15-13 The total amount of water flowing from public lands in the EIS area is not expected to change significantly under any of the alternatives. However, the timing of stream discharge will probably be altered under Alternatives 4 and 5 and to a lesser extent under Alternative 3. As stated on page 45, Impact on Water Resources, paragraph 1: "Improving the condition of stream riparian areas by restricting cattle grazing can result in a "sponge" effect that enables riparian vegetation to absorb spring runoff and release more water to streams in the summer.

15-14 The numbers were accidentally reversed. See text change page 52.



3600 S.W. Leahy Road  
Portland, Oregon 97225  
June 30, 1983

U.S. Dept of Interior  
BLM, Vale District  
PO Box 700  
Vale, Oregon 97913

Subject: Draft, Southern Malheur Grazing Management Program, EIS

Attn: Pearl M. Parker  
District Manager

Dear Mr. Parker:

Thank you for sending me a copy of this Draft EIS.

My main concern in management of grazing is the protection of the land and in particular the riparian edges in that mostly dry Eastern Oregon country side. I also realize that cattle is an integral part of the scene so my preference is a combination of your preferred alternative and the alternative 4 with its riparian protections and low horse numbers.

The protection of the streams is important to provide better fish habitat and also improves the quality of the water to down stream users. Also to some extent the time distribution of the water is improved in that the runoff will be delayed compared to bare score meadows.

I would like an answer to a question I have on Table 1-2, page 9: How does Alt 4 show such an increase in stream bank erosion compared to Alt 3 when Alt 4 has so much more riparian protection?

Since the wild horse is an introduced species, I definitely prefer the low numbers in Alternative 4.

I also like your consideration and conclusion in this table of various deferred grazing plans. The more the range can be grazed during the critical growing times, the better it will be in the long run and more diversity of plants will remain. Also it would seem that the plants would provide more forage value when it contains maturing seeds as well as the old seed which have more seeds.

Very truly yours,

Bob Fowne

Response to Comment Letter 16

16-1 See text change, Table 1-2.



DR. THEODORE T. COWGILL  
Jordan Valley  
Oregon 97910

June 7, 1983

District Manager  
P. O. Box 700  
100 East Oregon Street  
Vale, Oregon 97918

Re: Southern Malheur Grazing Management Program (SIP)

Dear Director:

We consider here a part of the oldest land planning in the western hemisphere--invaded by the Spanish in 1519--1521 A. D. the Aztec government was overthrown. The Aztec government had been a production planning rather than just a harvester from the bounty of undirected nature organization. The livestock industry began in California under Spanish guidance about 1531--1533 A. D., over 90 years before the Pilgrims landed at Plymouth rock in 1625 A. D. We had over 300 years of management of these lands with the following goals in mind before they were wrested from Mexico 137 years ago, and continuation by the conquerors taught by the conquered.

1. Cultivate the soil in the direction of preservation and improvement
  2. Develop the forage as to quality of product
  3. Produce the products needed by man
  4. And above all, Preserve the productivity for the centuries to come.
- With about 400 years of record behind us in a management program that for quality had no equal any where else in the world for similar land, management planned and carried out by local authority, our goals are the same today to carry on with range use planning.

We face these problems.

- A. The Soil
  1. Keep the soil there--avoid erosion
  2. Keep up the quality--humus, fixed nitrogen
  3. Keep the herbage--nutrition, healthy, productive
- B. Plants
  1. Hardy in the climate
  2. Nutritious with variety
  3. Maintain choice grass and legumes
- C. Climate
  1. Temperature--frost, season expectations etc.
  2. Drought--plant replaces root reserves from leaves in preference to seed
  3. frequent long dormant seasons

I refer to the following definitions :  
page 97. VIGOR - The relative well-being and health of a plant as reflected by its ability to manufacture sufficient food for growth, maintenance and reproduction.  
page 94. CRITICAL GROWING PERIOD - The portion of a plant's growing season, generally between flowering and seed dissemination, when carbohydrate reserves are being stored and seeds produced. Grazing after the start of this date is detrimental due to inadequate moisture for supporting further growth later in the season.

- 1 -

Theodore T. Cowgill to District Manager June 7, 1983 page 2

In maintenance of plant vigor I see the greatest demand put on a plant's food reserve to be immediately following its dormant period and its beginning growth in the spring. Until photosynthesis is established the growth is a heavy drain on the reserves of the plant's roots. The weather is often cold, and though moisture is most often present the work of the stomas is slow. If heavy grazing is permitted the plant vigor is reduced as additional stoma production must all be supported from plant reserves. When the time arrives for fast growth the plant's vigor is reduced to where a feeble effort comes forth and the soil moisture is often gone before the plant can replace its reserves even though the plant is not grazed.

Generally the critical point of the perennial plant's vigor is at the beginning of the rapid growth about May 1 to May 15. If the plants vigor has not been over taxed by heavy spring grazing at that time and moisture is available, the plant will grow so vigorously that up to fully one third of the leaves and half of the seed stems can be removed before the root reserve deposit will be greatly reduced. If moisture is short the survival instinct of the plant will forgo sending up seed stems and will drain the leaves for root replenishment. During the fast growth period of perennials unless vastly greater concentration of stock is on the pasture, the grass grows much faster than it can be grazed from May to July 15 and small risk of over grazing occurs during this period. Also cheat grass is preferred by stock for the early part of this period.

After seed ripe time the grazing value begins to decline as seed falls, is consumed and the grass dries. Normally after September 1 gain from range grazing is gone and if other feed is available range use without supplement is not profitable.

The need of fixed nitrogen in the production of feed is not made in the study. Most nitrogen for plant growth is produced by forage going through the animal portion of the nitrogen life cycle. The more of the crop from each year's crop that goes through the animal cycle the better for the pasture up to the point where stubble is just enough to shelter young growth and hold the soil. Animal manure is choice ground litter. The planting of some legumes with seedlings or on native lands can be a big help in providing additional fixed nitrogen.

A vast amount of effort has been expended in the preparation of the draft and as to the alternatives described in Chapter I pages 1 to 12 a choice is not easy. Alternatives 2 and 3 appear to be somewhat preferable. The following is comments on various statements throughout the study.

Page 37 Forage Allocation and Grazing Systems

I disagree as to the amount of grazing that can be done during the fast growth period of the forage.

Page 37 Early Spring Grazing System (EA)

I feel that heavy early spring grazing is the most destructive of plant vigor

Page 40 Rest Rotation Grazing System

Generally speaking I favor yearly control of the crop with clipping rather than leaving a full growth over on a field for a following year.

Page 41 Range improvements

Brush control by burning

by my observations has not been very favorable.





Theodore T. Gowgill to District Manager June 7, 1983 page 3

I have seen many desirable plants killed, and earth left open for erosion after even controlled fires. Except for areas where junipers are an item to control I oppose burning. I have seen many controlled and uncontrolled fires in Idaho as well as Oregon and I have my first fire to see where any real substantial gain has resulted from a fire.

Page 42

I have observed very dense sod around numerous watering places for livestock as they fertilize the areas heavily as they rest and chew their cuds.

Page 42 Range and Forage Condition and Trend

"Studies by McLean and Tisdale (1972) and Owensby et al (1973) showed that at least 20, and as much as 40 years of complete rest would be required for early condition range to completely recover"

Rest of 10 on any land without vitalization by having part of the production going through the nitrogen cycle would lead to very anemic forage.

Page 46 Impacts on Wildlife

Wildlife generally benefits as the environment for domestic stock is improved. Full year environment for livestock does the same for wildlife. Large game today is probably 200% of what it was before the livestock industry, as wildlife "creams the crop" of all the land while domestic livestock is controlled by fences. I contend that big game be controlled at about 200% of what it was before domestic livestock was produced. As you cannot raise chickens near willows or large brush that makes a cover for a coyote, a nesting sage hen is not safe in big brush where she cannot see a predator before it sees her. Were base property for livestock converted to row crops such as potatoes the wildlife including big game would probably be reduced by 90 or more percent.

Sincerely

*[Signature]*

## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Division of Ecological Services  
Portland Field Office  
727 N.E. 24th Avenue  
Portland, Oregon 97232

Reference: SH/SB

July 13, 1983

### MEMORANDUM

To : District Manager, Bureau of Land Management, Vale, Oregon

From : Field Supervisor, Division of Ecological Services, Portland, Or.

Subject: Review of Draft Environmental Impact Statement for Southern Malheur Grazing Management Program.

We have reviewed the subject Draft Environmental Impact Statement (DEIS) and provide the following comments for use in preparing the final statement.

In general, the DEIS adequately describes the proposed action, possible alternatives, and the environmental consequences of the alternatives. Alternative 4 would provide the greatest benefit to resources of concern to the Fish and Wildlife Service, although the proposed action would also provide somewhat improved conditions for fish and wildlife resources.

Riparian habitat is of critical importance to a variety of fish and wildlife species, and we encourage efforts to improve riparian habitat as recommended in the proposed action and in alternative 4.

We appreciate the opportunity to review and comment on this Draft Environmental Impact Statement.

*[Signature]*  
for Russell D. Peterson

cc:  
OEC, DC



## Text Changes

**Page 2**, Table 1-1, Alternative 3, Preferred Alternative, third line. Change Maximum Allowable Utilization to 60/50.

**Page 5**, Second column, third full paragraph, first sentence. Change 449,049 to 429,516.

**Page 9**, Table 1-2. See revised table.

**Page 12**, Second column. Delete last sentence.

**Page 19**, Table 2-4. Mule Deer, winter range, change 163,000 acres to 602,880 acres and enter 16,000 for population.

Mule Deer, summer range, change 2,755,000 to 2,519,400 and 40,400 to 14,000.

Pronghorn antelope, change population from 2,500 to 3,000.

Sage Grouse, change acreage of nesting habitat from 99,800 to the range 198,000 to 296,000.

**Page 20**, Second column, second paragraph under Fish. Add Eagle Lake rainbow trout, channel catfish and bluegill.

**Page 20**, Third paragraph, first sentence under Fish. Add course scale suckers, dace, chisel mouth, squawfish, carp, Lahonton redbreast and Tahoe suckers.

**Page 24**, First column, first full paragraph. Change 13,700 to 16,000. Second column, second full paragraph. Change 40,400 to 14,000.

**Page 25**, Last paragraph, third sentence. Change to read: California quail and mountain quail are closely associated with brushy riparian areas at elevations below 6,000 feet.

**Page 43**, Second column, third paragraph, third sentence. Change 359 to 425.

Second column, third paragraph, fourth sentence. Change 163 to 383 and 342 to 115.

**Page 44**, Second column, fourth full paragraph, second and third sentence. Change to: Of the

stream riparian areas with medium or high improvement potential, woody and herbaceous plants would increase on 20, 21, 77, 77, and 77 percent of stream miles due to exclusion and grazing management under Alternatives 1 through 5 respectively. Riparian vegetation would decrease on 66, 69, 5, 5 and 13 percent of these acres under Alternatives 1 through 5, respectively.

**Page 45**, First column, fourth full paragraph, fifth sentence. Change to: After 15 years, approximately 80 percent of the stream bank miles would be stable under Alternatives 3, 4 and 5. Delete sixth sentence.

**Page 46**, Under Water Quality, second paragraph, second sentence, insert the following: Movement of 2,4-D through the soil (leaching) is usually measured in terms of inches or a few feet (Norris 1975). This is a slow process that would not lead to stream contamination, because the herbicide would degrade before reaching free water (Ibid).

**Page 46**, Second column, first full paragraph. Change last sentence to read: Water quality (sediment yield, water temperature, fecal coliforms) would improve under Alternatives 3, 4 and 5.

**Page 49**, First column, second paragraph, second sentence. Change 325 acres to 115 acres.

**Page 50**, First column, first paragraph, last sentence. Change 25 miles to 70 miles, and 54 miles to 3 miles.

Second column, after the second full paragraph, add: Exposure to acute toxic levels of herbicide by wildlife is not anticipated as the LD 50 test levels indicate only moderate to slight toxicity (300-1000 mg/kg) for herbicides at levels applied in range management since herbicide spray is very unlikely to contact all forage in treated areas. Some animals are repelled by herbicide residues on their natural food and will forage elsewhere following a spray project.

Chronic (long term) effects of 2,4-D on wildlife are not anticipated. Animals are not exposed to repeated treatments, and 2,4-D residue ingested by them are excreted, tending not to concentrate in body tissues (Newton and Norris 1968).

**Page 52**, First column, last paragraph, third sentence. Change to read: Riparian dependent species would increase most under Alternatives 3, 4 and 5.



**Page 52**, Second column, first paragraph, fourth sentence. Change 12 miles to 57 miles, and 54 miles to 3 miles.

**Page 54**, Second column, first paragraph, second sentence. Change Alternatives 2, 3, 4 and 5 to Alternatives 2 and 3.

**Page 55**, Second column, first paragraph, first sentence. Change to read: Under Alternatives 3, 4 and 5 habitat for the Whitehorse cutthroat trout would be enhanced within the Whitehorse Basin ACEC.

**After the last full paragraph add:**

## **Impacts of Human Health**

Exposure to 2,4-D used in sagebrush control is most likely to occur to handlers, applicators, crew supervisors and observers at or adjacent to spray units. Mixer/loaders have been found to receive the greatest exposure due to handling of concentrated chemicals (Lavy et al. 1980).

The probability of the general public being exposed to 2,4-D used on rangeland sagebrush would be very low. This is due to remoteness of location from population centers and the springtime application which is not during the season of use for hunters and most other recreation users.

The laboratory dosages at which potential reproductive effects have been detected, or at which carcinogenic and mutagenic effects have been tested for and not found, are much greater in concentration and duration than any exposure that would occur in the field as a result of brush control. Because of the limited toxicity of the herbicide proposed for use and the low potential for exposure, the likelihood of an adverse impact on human health is negligible.

**Page 101**, Add the following references cited:

**Ganskopp, David C.**

1983. Habitat Use and Spatial Interactions of Cattle, Wildl Horses, Mule Deer, and California Bighorn Sheep in the Owyhee Breaks of Southeastern Oregon.

**Lardy, Michael Edward**

1980. Raptor Inventory and Ferruginous Hawk breeding Biology in Southeastern Oregon. Thesis, Master of Science, University of Idaho, Moscow.

**Lavy, T.L., J.S. Shepard and D.C. Bouchard**  
1980. Field Worker Exposure and Helicopter Spray Pattern of 2,4,5-T. Bull. Environ. Contam. Toxicol.:90-96.

**Newton, Michael and Logan A. Norris**

1968. Herbicide Residue in Blacktail Deer from Forests Treated with 2,4,5-T and Atrazine. Proc. West. Soc. of Weed Sci., pp. 32-34.

**Norris, Logan A.**

1975. Behavior and Impact of Some Herbicides in the Forest. Pac. Northwest For. and Range Exp. Stn., Forestry Sciences Laboratory, Corvallis, Oreg.



**Table 1-2 Summary Comparison of Long-Term Impacts of the Alternatives**

Significant Resource	Existing Situation	Alt. 1 No Action	Alt. 2 Emphasize Livestock	Alt. 3 Preferred Alternative	Alt. 4 Emphasize Non-Livestock	Alt. 5 Emphasize Wild Horses
<b>Water</b>						
Runoff		NC	NC	+ L	+ L	+ L
Fecal coliforms		NC	NC	+ L	+ H	+ L
Sediment yield		NC	NC	+ L	+ M	+ M
<b>Vegetation</b>						
Range Trend (3,992,250 Acres Total)						
Up	16%	42%	64%	78%	77%	58%
Static	75%	46%	33%	20%	21%	40%
Down	5%	12%	3%	2%	2%	2%
Unknown	4%	0%	0%	0%	0%	0%
Total residual ground cover	NC	NC	- H	- H	- M	- M
Forage production (AUMs)	462,249	NC	+ 15%	+ 12%	6%	+ 6%
<b>Streamside Riparian</b>						
Vegetation Trend (2,814 Acres Total) <sup>1</sup>						
Increasing		3%	3%	14%	15%	15%
Static		75%	74%	76%	75%	75%
Decreasing		16%	17%	4%	4%	4%
Unknown		6%	6%	6%	6%	6%
<b>Wildlife Populations</b>						
Deer		NC	NC	NC	NC	NC
Antelope		NC	+ L	+ L	NC	NC
Small mammals		NC	- L	- L	+ L	+ L
Water-associated birds		NC	NC	+ L	+ L	+ L
Upland game birds		NC	- L	- L	+ L	+ L
Other birds		NC	- L	- L	+ L	+ L
Reptiles		NC	- L	- L	+ L	+ L
Amphibians		- L	- L	- L	+ L	+ L
Fish		- M	- M	- L	+ H	+ H
<b>Soils</b>						
Upland Erosion (3,992,250 Acres Total)						
Decreasing		40%	7%	17%	41%	37%
Static		46%	61%	67%	48%	37%
Increasing		14%	32%	16%	11%	26%
Streambank Erosion (375 Miles Total)						
Increasing		14%	14%	35%	42%	42%
Static		45%	41%	46%	40%	38%
Decreasing		26%	30%	4%	3%	5%
Unknown		15%	15%	15%	15%	15%
<b>Wild Horses (Numbers)</b>	1,531	1,365	900	1,100	600	3,666
<b>Recreation</b>						
Projected visitor use		NC	NC	NC	NC	NC
<b>Visual Resources (Contrast)</b>						
		NC	- L	- L	NC	NC
<b>Special Areas</b>						
Degradation		NC	NC	NC *	NC	NC
<b>Socioeconomics<sup>2</sup></b>						
Local personal income (\$000)	44,100	+ 120/ + 120	+ 3045/ + 3430	+ 1918/ + 2700	+ 567/ + 900	- 250/ + 466
Local employment (jobs)	1,320	+ 4/ + 4	+ 114/ + 104	+ 66/ + 81	+ 19/ + 27	- 5/ + 14

Note: NC = no change, + = beneficial, - = adverse, L = low, M = medium, H = high

<sup>1</sup> Species composition of key woody and herbaceous species.

<sup>2</sup> Socioeconomic impacts are shown as changes from the existing situation in Malheur County. Short term/long term changes in personal income (at annual rates) is in thousands of 1981 dollars.



### Table 3-1 Long-Term Vegetation Impacts

Vegetative Characteristic	Existing Situation	Alt. 1 No Action	Alt. 2 Emphasize Livestock	Alt. 3 Preferred Alternative	Alt. 4 Emphasize Non-Livestock	Alt. 5 Emphasize Wild Horses
<b>Range Condition</b> (3,392,250 Acres Total)						
Late	20%	47%	70%	71%	70%	53%
Middle	60%	32%	10%	8%	10%	27%
Early	8%	9%	5%	7%	8%	8%
Unknown <sup>1</sup>	4%	4%	4%	4%	4%	4%
Seedings <sup>2</sup>	8%	8%	11%	10%	8%	8%
<b>Range Trend</b> (3,992,250 Acres Total)						
Up	16%	42%	64%	78%	77%	58%
Static	75%	46%	33%	20%	21%	40%
Down	5%	12%	3%	2%	2%	2%
Unknown	4%	0%	0%	0%	0%	0%
<b>Total Residual Ground Cover</b> (3,392,250 Acres Total)						
Increasing		7%	<1%	1%	27%	24%
Static		84%	12%	22%	24%	23%
Decreasing		9%	88%	77%	49%	53%
<b>Long Term Forage Production (AUMs)<sup>3</sup></b>						
	462,249	462,249	546,620	532,475	501,295	501,295
<b>Streamside Riparian Vegetation Trend<sup>4</sup> (Acres)</b>						
Increasing		92	95	383	425	428
Static		2,168	2,096	2,150	2,122	2,095
Decreasing		388	457	115	101	126
Unknown		166	166	166	166	165

<sup>1</sup> Acreage classified as unknown includes fenced Federal range and unallotted areas.

<sup>2</sup> Range condition is not rated on seedlings. Most seedlings in the EIS area are in excellent forage condition.

<sup>3</sup> Forage production on Federal range only.

<sup>4</sup> Species composition of key woody riparian species only.

### Table 3-4 Soil Erosion Trend

	Erosion Trend	Alt. 1 No Action	Alt. 2 Emphasize Livestock	Alt. 3 Preferred Alternative	Alt. 4 Emphasize Non-Livestock	Alt. 5 Emphasize Wild Horses
<b>Streambanks</b> (375 Miles Total)	Decreasing	14%	14%	35%	42%	42%
	Static <sup>1</sup>	45%	41%	46%	40%	38%
	Increasing	26%	30%	4%	3%	5%
	Unknown	15%	15%	15%	15%	15%
<b>Uplands</b> (3,992,250 Acres Total)	Decreasing	40%	7%	17%	41%	37%
	Static	46%	61%	67%	48%	37%
	Increasing	14%	32%	16%	11%	26%

<sup>1</sup> Includes 81 miles located in unallotted areas.



**Table 3-5 Proposed Grazing Management in Streamside Riparian Habitat**

Grazing System <sup>1</sup>	Alt. 1 No Action		Alt. 2 Emphasize Livestock		Alt. 3 Preferred Alternative		Alt. 4 Emphasize Non-Livestock		Alt. 5 Emphasize Wild Horses	
	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
Exclusion	74	31	74	31	142	34	448	159	452	161
Rest Rotation 2	92	28	33	14	17	6	26	9	0	0
Rest Rotation 3	78	24	78	24	9	3	9	3	26	9
Rest Rotation 4	59	25	14	12	30	24	14	12	14	12
Deferred	138	51	138	51	7	3	0	0	0	0
Deferred Rotation 1	145	46	290	83	112	31	119	39	118	39
Deferred Rotation 2	73	3	91	8	401	114	167	28	164	27
Deferred Rotation 3	0	0	4	1	9	3	4	1	4	1
Deferred Rotation 4	69	22	51	18	62	21	62	21	62	21
Winter	29	10	29	10	9	3	9	3	9	3
Spring	92	34	55	24	61	27	9	3	9	3
Spring/Summer	93	17	86	16	84	23	76	14	85	16
Spring/Fall	1	1	0	0	0	0	0	0	0	0
Fenced Federal Range	17	4	17	4	17	4	17	4	17	4
Unallotted	1,854	79	1,854	79	1,854	79	1,854	79	1,854	79
<b>Totals</b>	<b>2,814</b>	<b>375</b>	<b>2,814</b>	<b>375</b>	<b>2,814</b>	<b>375</b>	<b>2,814</b>	<b>375</b>	<b>2,814</b>	<b>375</b>

<sup>1</sup> Rest Rotation 1 - 1 year Spring-Summer, 1 year deferred, 1 year rest.

Rest Rotation 2 - 1 year Spring-Summer, 1 year rest

Rest Rotation 3 - 2 years Spring-Summer

Rest Rotation 4 - 1 or 2 years Spring-Summer, 2 years rest

Deferred - 1 month grazing in September.

Deferred Rotation 1

Deferred Rotation 1 - 1 year Spring-Summer, 1 year deferred

Deferred Rotation 2 - 1 year Spring - 1 year deferred

Deferred Rotation 3 - 1 year Spring-Summer, 1 year Winter

Deferred Rotation 4 - 1 year Spring or Spring-Summer, 2 years deferred

**Table 3-6 Expected Long-Term Condition and Trend of Wildlife Habitat in Streamside Riparian Areas**

Condition	Existing Situation		Alt. 1 No Action		Alt. 2 Emphasize Livestock		Alt. 3 Preferred Alternative		Alt. 4 Emphasize Non-Lvst.		Alt. 5 Emphasize Wild Horses	
	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles	Acres	Miles
Excellent	20	7	72	37	63	36	180	59	372	137	372	137
Good <sup>1</sup>	2118	173	1939	131	1953	133	2083	181	1958	125	1959	126
Fair <sup>2</sup>	499	125	406	82	311	68	288	70	217	48	191	38
Poor	61	15	231	70	321	83	97	10	101	10	126	19
Unknown	166	55	166	55	166	55	166	55	166	55	166	55
<b>Total</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>
<b>Trend</b>												
Up	—		92	51	95	52	163	55	425	157	428	159
Static <sup>3</sup>	—		2168	171	2096	156	2160	179	2122	152	2094	142
Down	—		388	98	457	112	325	86	101	11	126	19
Unknown	—		166	55	166	55	166	55	166	55	166	55
<b>Total</b>			<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>	<b>2814</b>	<b>375</b>

<sup>1</sup> Includes 1,840 acres and 78 miles located in unallotted areas.

<sup>2</sup> Includes 15 acres and 3 miles located in unallotted areas.

<sup>3</sup> Includes 1,854 acres and 81 miles located in unallotted areas.



**Table 3-8 Expected Long Term Condition and Trend of Stream Fisheries Habitat (Miles)**

<b>Condition</b>	<b>Existing Condition</b>	<b>Alt. 1 No Action</b>	<b>Alt. 2 Emphasize Livestock</b>	<b>Alt. 3 Preferred Alternative</b>	<b>Alt. 4 Emphasize Non-Livestock</b>	<b>Alt. 5 Emphasize Wild Horses</b>
Excellent	0	11	11	18	59	60
Good <sup>1</sup>	41	26	27	76	50	48
Fair <sup>2</sup>	186	155	151	144	127	127
Poor <sup>3</sup>	26	61	64	15	17	18
<b>Total</b>	<b>253</b>	<b>253</b>	<b>253</b>	<b>253</b>	<b>253</b>	<b>253</b>
<b>Trend</b>						
Up		19	25	71	83	83
Static <sup>4</sup>		174	161	122	165	165
Down		60	67	60	5	5
<b>Total</b>		<b>253</b>	<b>253</b>	<b>253</b>	<b>253</b>	<b>253</b>

<sup>1</sup> Includes 3 miles located in unalloted areas.

<sup>2</sup> Includes 76 miles located in unalloted areas.

<sup>3</sup> Includes 2 miles located in unalloted areas.

<sup>4</sup> Includes 81 miles located in unalloted areas.



# Table B-1 Forage Allocations (AUMs)

Allot. Number	Allot. Name	Lvsik. Forage Prod.	Federal Acres	All. 1 No Action			All. 2 Emphasize Lvsik.			All. 3 Preferred Alt.			All. 4 Emphasize Non Lvsik.			All. 5 Emphasize Wild Horses											
				ST/LTLV	WH	NC	STLV	LTLV	WH	NC	STLV	LTLV	WH	NC	STLV	LTLV	WH	NC	STLV	LTLV	WH	NC					
0300	Skull Springs	32,225	278,465	27,332	2,844	0	639	29,779	33,138	1,800	7	639	27,379	30,738	1,800	2,407	639	21,984	25,343	0	9,602	639	15,779	19,138	6,205	9,602	639
0303	Turnbull Lake	8,733	81,403	6,964	0	0	45	8,688	10,850	0	0	45	8,005	8,973	0	683	45	6,419	6,897	0	2,269	45	6,419	6,897	0	2,269	45
0304	Black Butte	8,095	50,091	5,779	252	0	176	7,919	8,670	0	0	176	7,319	7,979	0	600	176	5,982	6,220	0	1,937	176	4,982	5,220	1,000	1,937	176
0305	Bridge Creek	1,712	13,531	1,178	0	102	1,610	2,271	0	0	102	1,609	2,238	0	1	102	1,609	1,698	0	1	102	1,609	1,698	0	1	102	102
0306	Jonesboro	3,085	19,936	2,661	0	153	2,932	3,691	0	0	153	2,748	3,397	0	184	153	2,222	2,381	0	710	153	2,222	2,381	0	710	153	
0307	Boney Basin	3,156	17,002	2,963	0	144	3,012	3,082	0	0	144	2,487	2,537	0	525	144	1,955	1,955	0	1,057	144	1,955	1,955	0	1,057	144	
0400	Harper Basin	38,354	427,338	38,910	0	644	37,710	39,072	0	1	644	34,213	35,575	0	3,498	644	27,024	28,386	0	10,687	644	27,024	28,386	0	10,687	644	
0407	Little Valley	1,338	13,916	774	0	23	1,315	1,434	0	0	23	1,243	1,276	0	72	23	1,099	1,132	0	216	23	1,099	1,132	0	216	23	
0408	Mitchell Butte	73	2,545	152	0	17	55	67	0	1	17	55	67	0	1	17	55	67	0	1	17	55	67	0	1	17	
0410	Radar Hill	748	5,126	686	0	11	737	737	0	11	11	680	680	0	57	11	566	566	0	171	11	566	566	0	171	11	
0412	Chalk Butte	60	261	60	0	7	53	53	0	0	7	53	53	0	0	7	53	53	0	0	7	53	53	0	0	7	
0500	Mahogany	37,695	327,129	34,848	1,800	0	786	35,069	36,472	1,800	40	786	32,260	33,663	1,800	2,849	786	28,595	29,998	0	8,314	786	24,510	25,913	4,085	8,314	786
0501	Blackjack	1,184	14,232	1,050	0	71	1,103	1,390	0	10	71	1,103	1,390	0	10	71	869	1,036	0	244	71	869	1,036	0	244	71	
0502	Derrick	244	844	244	0	11	233	233	0	0	11	233	233	0	0	11	233	233	0	0	11	233	233	0	0	11	
0506	Birch Creek	189	2,751	191	0	19	170	200	0	0	19	170	200	0	0	19	170	200	0	0	19	170	200	0	0	19	
0601	Dowell	2,787	47,742	2,450	0	36	2,751	2,751	0	0	36	2,751	2,751	0	0	36	2,751	2,751	0	0	36	2,751	2,751	0	0	36	
0602	Horseshoe T	4,029	42,537	4,025	0	123	3,906	3,906	0	0	123	3,906	3,906	0	0	123	3,906	3,906	0	0	123	3,906	3,906	0	0	123	
0603	McEwen	7,767	60,656	5,254	0	129	7,638	10,137	0	0	129	7,193	9,601	0	445	129	6,036	7,994	0	1,602	129	4,803	6,761	1,233	1,602	129	
0604	Morger	2,027	61,783	2,100	0	62	1,965	1,965	0	0	62	1,965	1,965	0	0	62	1,965	1,965	0	0	62	1,965	1,965	0	0	62	
0605	Venator	2,559	21,604	2,309	0	96	2,463	2,463	0	0	96	2,463	2,463	0	0	96	2,463	2,463	0	0	96	2,463	2,463	0	0	96	
0701	Sheepheads	5,322	78,682	3,000	2,587	0	72	4,238	7,419	1,008	4	72	3,902	6,057	1,344	4	72	3,174	4,509	1,008	1,068	72	0	0	2,285	2,965	72
0801	Barren Valley	35,080	442,894	10,237	6,611	0	124	31,006	41,213	3,942	8	124	29,049	38,863	5,706	201	124	23,838	32,900	3,942	7,176	124	4,384	18,727	18,115	13,357	124
0802	Sand Gap	2,839	40,412	1,119	486	0	4	2,385	2,385	450	0	4	2,085	2,085	750	0	4	2,385	2,385	450	0	4	0	0	1,620	1,315	4
0901	Lodge	3,070	17,404	3,150	0	0	4	3,066	4,229	0	0	4	3,066	4,229	0	0	4	2,720	3,883	0	346	4	2,720	3,883	0	346	4
0902	West Cow Creek	17,406	139,885	9,738	0	116	17,273	23,232	0	17	116	16,294	21,713	0	996	116	12,758	14,311	0	4,532	116	12,758	14,311	0	4,532	116	
0903	East Cow Creek	9,373	44,379	6,444	0	42	9,328	10,640	0	3	42	8,366	9,606	0	965	42	7,024	7,607	0	2,307	42	7,024	7,607	0	2,307	42	
0904	Bogus Creek	250	4,498	250	0	0	250	300	0	0	0	250	250	0	0	0	250	250	0	0	0	250	250	0	0	0	
0905	Oliver	516	6,897	560	0	12	504	2,216	0	0	12	504	1,216	0	0	12	504	1,041	0	0	12	504	1,041	0	0	12	
0907	Morum	150	5,566	150	0	0	150	150	0	0	0	150	150	0	0	0	150	150	0	0	0	150	150	0	0	0	
1001	Arck	16,566	67,997	9,519	0	108	16,436	18,362	0	22	108	14,898	16,605	0	1,560	108	12,548	12,670	0	3,910	108	12,548	12,670	0	3,910	108	
1002	Antelope	12,144	52,465	10,671	0	58	10,699	13,429	0	1,387	58	10,128	12,439	0	1,958	58	8,822	10,823	0	3,264	58	8,822	10,823	0	3,264	58	
1003	Wroten	4,130	16,218	2,836	0	0	4,130	4,556	0	0	0	3,987	4,272	0	143	0	3,515	3,750	0	615	0	3,515	3,750	0	615	0	
1004	Willow Creek	14,971	74,901	10,521	0	103	14,866	18,029	0	2	103	13,986	16,414	0	882	103	11,728	12,601	0	3,140	103	11,728	12,601	0	3,140	103	
1005	Raburn	1,401	6,254	1,040	0	0	1,401	1,715	0	0	0	1,383	1,697	0	18	0	1,114	1,378	0	287	0	1,114	1,378	0	287	0	
1006	Eiguren Individual	367	3,266	301	0	0	367	367	0	0	0	367	367	0	0	0	367	367	0	0	0	367	367	0	0	0	
1007	Arelgold	194	1,864	194	0	0	194	194	0	0	0	194	194	0	0	0	194	194	0	0	0	194	194	0	0	0	
1101	Jackies Butte	30,685	212,161	14,334	1,800	0	76	28,764	35,585	1,800	45	76	24,884	31,223	1,800	3,925	76	20,469	21,753	1,800	8,340	76	7,581	15,993	7,560	15,468	76
1102	Ambrose Maher	612	4,002	580	0	32	580	580	0	0	32	580	580	0	0	32	580	580	0	0	32	580	580	0	0	32	
1103	Jackies Butte	1,459	19,522	485	0	34	1,425	2,165	0	0	34	1,182	1,922	0	243	34	939	939	0	486	34	939	939	0	486	34	
1201	Fifteen Mile	26,990	331,400	25,713	0	392	26,374	37,434	0	224	392	25,308	35,528	0	1,290	392	21,829	23,844	0	4,769	392	21,829	23,844	0	4,769	392	
1202	McCormick	5,322	53,808	8,694	0	60	5,260	8,023	0	2	60	5,107	7,608	0	155	60	3,611	4,697	0	1,651	60	3,611	4,697	0	1,651	60	
1203	Zimmerman	5,564	30,474	5,208	0	95	5,468	5,982	0	1	95	5,295	5,809	0	174	95	4,922	5,046	0	547	95	4,922	5,046	0	547	95	
1204	Willow Creek	5,551	83,442	5,030	0	122	5,378	8,448	0	51	122	5,183	7,008	0	246	122	4,782	5,409	0	647	122	4,782	5,409	0	647	122	
1301	Gilbert	9,298	52,781	4,277	0	109	9,187	9,690	0	2	109	8,316	8,719	0	873	109	6,774	7,157	0	2,415	109	6,774	7,157	0	2,415	109	
1302	Echave	4,066	16,762	1,500	0	9	4,057	4,852	0	0	9	3,573	4,368	0	484	9	3,088	3,783	0	969	9	3,088	3,783	0	969	9	
1303	Sherburn	9,343	44,026	3,613	0	34	9,309	9,668	0	0	34	8,110	8,190	0	1,199	34	6,641	6,641	0	2,668	34	6,641	6,641	0	2,668	34	
1304	Abisu-Alcoria	1,450	12,843	994	0	33	1,417	3,346	0	0	33	1,299	1,562	0	118	33	1,091	1,214	0	326	33	1,091	1,214	0	326	33	
1305	Eiguren	8,915	64,443	5,500	0	20	8,891	11,163	0	4	20	8,683	10,895	0	212	20	7,243	9,115	0	1,652	20	7,243	9,115	0	1,652	20	
1306	Campbell	42,585	157,037	14,364	0	0	42,539	45,512	0	6	40	37,443	40,316	0	5,102	40	29,957	32,680	0	12,588	40	29,957	32,680	0	12,588	40	
1307	Louise Canyon	17,321	127,785	11,135	0	104	17,140	19,943	0	77	104	16,755	17,816	0	462	104	15,167	16,118	0	2,050	104	15,167	16,118	0	2,050	104	
1308	Ten Mile SDG	718	3,477	0	0	0	711	711	0	7	0	657	657	0	61	0	547	547	0	171	0	547	547	0	171	0	
1401	Anderson	5,525	39,404	2,964	0	73	5,430	5,616	0	22	73	5,429	5,464	0	23	73	4,329	4,329	0								

<sup>1</sup> Includes 53 AUMs located in unallotted areas.  
<sup>2</sup> Includes approximately 64,000 acres with grazing use presently unallotted.

Key

ST/LTLV - Short Term and Long Term Livestock  
LTLV - Long Term Livestock  
WH - Wild Horses (Initial and Long Term)  
WL - Wildlife (Initial and Long Term)  
NC - Nonconsumptive (Initial and Long Term)



# Appendix G, Table G-1 Streamside Riparian Habitat - Predicted Trend and Condition

				Alt. 1 No Action				Alt. 2 Emphasize Livestock				Alt. 3 Preferred Alternative				Alt. 4 Emphasize Non Livestock				Alt. 5 Emphasize Wild Horses			
Streams	Allot	Miles	Acres	Exist. Cond.	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend				
ANTELOPE CR¹	1201	6.75	6.0	E	DF	G	D	DF	G	D	DR2	E	U	EX1	E	U	EX1	E	U				
ANTELOPE CR¹	1201			G	DF	G	S	DF	G	S	DR2	G	S	EX1	E	U	EX1	E	U				
ANTELOPE CR¹	1201			G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U				
ANTELOPE CREEK¹	1306	9.50	8.1	G	RR4	G	S	RR4	G	S	RR4	G	S	RR4	G	S	RR4	G	S				
BASIN CREEK	0400	6.00	18.1	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?				
BIRCH CR	0506	2.00	6.1	?	SS	?	?	SS	?	?	SS	?	?	SS	?	?	SS	?	?				
BLUE CANYON	0500	3.00	9.1	?	W	?	?	W	?	?	W	?	?	W	?	?	W	?	?				
CAMP CREEK	0300	2.00	6.1	?	RR2	?	?	DR1	?	?	DR1	?	?	EX1	?	?	EX1	?	?				
CARTER CR	0500	3.00	10.7	E	DR1	G	D	RR4	E	S	RR4	E	S	RR4	E	S	RR4	E	S				
CARTER CR	0500			G	DR1	F	D	RR4	E	U	RR4	E	U	RR4	E	U	RR4	E	U				
CARTER CR	0500			G	DR1	F	D	RR4	G	S	RR4	G	S	RR4	G	S	RR4	G	S				
CARTER CR	0500			G	SS	F	D	EA	E	U	EA	E	U	EA	E	U	EA	E	U				
CHEROKEE CREEK	1203	3.00	9.0	F	SS	P	D	SS	P	D	SS	P	D	RR2	F	S	SS	P	D				
COTTONWD CR¹	1201	4.75	16.5	F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U				
COTTONWOOD CR¹	1202	2.25	2.7	G	EA	E	U	EA	E	U	EA	E	U	EX1	E	U	EX1	E	U				
COTTONWOOD CR¹	1202			F	EA	G	U	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U				
COTTONWOOD CREEK¹	0300	16.00	28.4	F	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S				
COTTONWOOD CREEK¹	0300			F	DR1	F	S	DR1	P	D	DR2	F	S	DR2	F	S	DR2	F	S				
COTTONWOOD CREEK¹	0300			F	EA	F	S	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S				
COTTONWOOD CREEK¹	0300			F	RR2	F	S	DR1	F	S	DR2	F	S	DR2	F	S	EX1	G	U				
COTTONWOOD CREEK¹	0300			F	RR2	F	S	DR1	F	S	DR2	F	S	EX1	G	U	EX1	G	U				
COTTONWOOD CREEK¹	0300			F	RR2	F	S	DR1	P	D	DR2	F	S	EX1	G	U	EX1	G	U				
COTTONWOOD CREEK¹	0300			P	RR2	P	S	DR1	P	D	DR2	P	S	EX1	G	U	EX1	G	U				
COTTONWOOD CREEK¹	0400	0.40	1.2	F	SF	F	S	SS	F	S	SS	F	S	SS	F	S	SS	F	S				
COVE CR	0500	5.00	15.1	?	DR1	?	?	DR1	?	?	DR4	?	?	DR4	?	?	DR4	?	?				
COVE CR	0500			?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?				
CROOKED CR	0801	3.00	6.3	E	EA	E	S	EA	E	S	EA	E	S	EA	E	S	EA	E	S				
CROOKED CR	0801			G	EA	E	U	EA	E	U	EA	E	U	EA	E	U	EA	E	U				
CROOKED CR	0801			G	SS	P	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D				
DOG CR	0500	3.00	9.1	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?				
DOG CR	0500			?	EA	?	?	SS	?	?	SS	?	?	SS	?	?	SS	?	?				
DOOLITTLE CREEK	1201	6.00	18.0	G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U				
DOOLITTLE CREEK	1201			F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U				
DRY CR	0400	4.50	17.9	E	DR4	G	D	DR2	G	D	DR2	G	D	EX1	E	U	EX1	E	U				
DRY CR	0400			G	DR4	G	S	DR2	G	S	DR2	G	S	EX1	E	U	EX1	E	U				
DRY CR	0400			G	DR4	F	D	DR2	F	D	DR2	F	D	EX1	E	U	EX1	E	U				
DRY CR	0400			F	DR4	F	S	DR2	F	S	DR2	F	S	EX1	E	U	EX1	E	U				
FIFTEEN MILE CR	1201	11.00	33.0	G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U				
FIFTEEN MILE CR	1201			F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U				
FISH CR	0500	1.50	4.5	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?				
FISH CREEK	1201	5.00	15.0	G	DF	F	D	DF	F	D	DF	F	D	EX1	E	U	EX1	E	U				
FISH CREEK	1201			G	RR3	F	D	RR3	F	D	RR3	F	D	RR3	E	U	RR3	E	U				
GOLD CREEK	0300	4.50	18.2	E	RR4	E	S	DR1	G	D	DR2	E	S	DR2	E	S	DR2	E	S				
GOLD CREEK	0300			G	RR4	E	U	DR1	F	D	DR2	G	S	DR2	G	S	DR2	G	S				
GOLD CREEK	0300			G	RR4	G	S	DR1	G	S	DR2	G	S	DR2	G	S	DR2	G	S				
GRANITE CREEK	0300	2.00	6.0	F	W	?	?	W	?	?	DR1	?	?	DR1	?	?	DR1	?	?				
HUNTER CR	0307	2.00	6.1	?	SS	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?				
INDIAN CR	1202	11.00	21.5	G	EA	E	U	EA	E	U	EA	E	U	EX1	E	U	EX1	E	U				
INDIAN CR	1202			G	EA	G	S	EA	G	S	EA	G	S	EX1	E	U	EX1	E	U				
INDIAN CR	1202			F	EA	G	U	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U				
INDIAN CR	1202			P	EA	F	U	EA	F	U	EA	F	U	EX1	G	U	EX1	G	U				
INDIAN CR	1202			P	EA	F	S	EA	F	U	EA	F	U	EX1	G	U	EX1	G	U				
JORDAN CR	UNA	2.00	5.5	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S				
KEENEY CREEK	0400	8.00	24.0	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?				
L CROWLEY CR	0300	1.00	3.0	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?				
L WHITEHORSE CR	1204	8.90	10.5	E	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			G	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			G	RR2	G	U	RR2	G	U	DR2	E	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			G	RR2	G	S	RR2	G	S	DR2	E	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			F	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			F	RR2	F	U	RR2	F	U	DR2	G	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			P	RR2	P	S	RR2	P	S	DR2	F	U	EX1	E	U	EX1	E	U				
L WHITEHORSE CR	1204			P	RR2	P	D	RR2	P	D	DR2	F	U	EX1	G	U	EX1	G	U				
LINE CANYON CR	1203	3.25	5.6	F	RR3	P	D	RR3	P	D	EA	G	U	EX1	E	U	EX1	E	U				
LITTLE OWYHEE RIVER	1307	28.75	32.8	G	DR1	G	S	DR1	G	S	RR4	G	S	EX1	E	U	EX1	E	U				
LITTLE OWYHEE RIVER	1307			G	DR1	F	D	DR1	F	D	RR4	E	U	EX1	E	U	EX1	E	U				
LITTLE OWYHEE RIVER	1307			G	DR1	G	S	DR1	G	S	RR4	G	S	DR1	G	S	DR1	G	S				
LITTLE OWYHEE RIVER	1307			F	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
LITTLE OWYHEE RIVER	1307			F	DR1	P	D	DR1	P	D	RR4	G	U	EX1	E	U	EX1	E	U				
LITTLE OWYHEE RIVER	1307			P	DR1	P	S	DR1	P	S	RR4	P	S	EX1	F	U	EX1	F	U				
LITTLE OWYHEE RIVER	1307			P	DR1	P	D	DR1	P	D	RR4	F	U	EX1	G	U	EX1	G	U				



# Appendix G, Table G-1 Streamside Riparian Habitat - Predicted Trend and Condition (Continued)

Streams	Allot	Miles	Acres	Alt. 1 No Action				Alt. 2 Emphasize Livestock				Alt. 3 Preferred Alternative				Alt. 4 Emphasize Non Livestock				Alt. 5 Emphasize Wild Horses			
				Exist. Cond.	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	
MAHOGANY CR	0500	0.75	0.9	E	DR1	G	D	EA	E	S	EA	E	S	EX1	E	S	EX1	E	S	EX1	E	S	
MAHOGANY CR	0500			G	DR1	F	D	EA	G	S	EA	G	S	EX1	G	S	EX1	G	S	EX1	G	S	
MALHEUR RIVER	UNA	2.50	15.2	F	UNA	F	S	NA	F	S	NA	F	S	NA	F	S	NA	F	S	NA	F	S	
MALHEUR RIVER	0300	0.30	1.8	F	RR2	F	S	DR1	F	S	DR2	F	S	DR2	F	S	EX1	F	U	EX1	F	U	
MALHEUR RIVER	0304	5.40	32.8	F	DF	F	S	DF	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
MALHEUR RIVER	0304			F	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	EX1	?	U	EX1	?	U	
MALHEUR RIVER	0304			F	EA	F	S	DR1	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
MALHEUR RIVER	0304			F	RR2	F	S	DR1	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
MALHEUR RIVER	0410	1.20	7.3	F	FFR	F	S	FFR	F	S	FFR	F	S	FFR	F	S	FFR	F	S	FFR	F	S	
MC DERMITT CR	1202	3.00	8.3	F	EA	G	U	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
MC DERMITT CR	1203	11.75	46.9	G	RR3	F	D	RR3	F	D	DR2	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
MC DERMITT CR	1203			F	RR3	P	D	RR3	P	D	DR2	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
MC DERMITT CR	1203			P	RR3	P	D	RR3	P	D	DR2	F	U	EX1	G	U	EX1	G	U	EX1	G	U	
MINE CREEK	1203	3.00	9.0	F	RR3	P	D	RR3	P	D	RR2	F	S	RR2	F	S	RR3	P	D	RR3	P	D	
NEGRO ROCK CR	0400	4.60	13.9	?	W	?	?	W	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	
NF SQUAW CREEK	0300	6.25	19.1	E	RR4	E	S	DR1	G	D	DR2	E	S	DR2	E	S	DR2	E	S	DR2	E	S	
NF SQUAW CREEK	0300			G	RR4	G	S	DR1	F	D	DR2	G	S	DR2	G	S	DR2	G	S	DR2	G	S	
NF SQUAW CREEK	0300			F	RR4	G	U	DR1	P	D	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
NF SQUAW CREEK	0300			F	RR4	F	S	DR1	P	D	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
OLD MAIDS CR	0500	2.50	7.6	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	DR1	?	?	
OLD MAIDS CR	0500			?	SS	?	?	SS	?	?	SS	?	?	SS	?	?	SS	?	?	SS	?	?	
OREGON CAN CR	1201	10.75	7.3	E	DF	G	D	DF	G	D	DR2	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
OREGON CAN CR	1201			G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
OREGON CAN CR	1201			F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
OREGON CAN CR	1201			F	DF	P	D	DF	P	D	DR2	G	U	EX1	G	U	EX1	G	U	EX1	G	U	
OREGON CAN CR	1201			P	DF	P	D	DF	P	D	DR2	F	U	EX1	G	U	EX1	G	U	EX1	G	U	
OREGON CANYON CR	1201	0.75	0.8	G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
OWYHEE RIVER	UNA	0.20	1.8	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	
OWYHEE RIVER	0303	1.50	36.4	F	RR2	F	S	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D	
OWYHEE RIVER	0400	5.80	140.5	G	DR1	F	D	DR1	F	D	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
OWYHEE RIVER	0400			F	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
OWYHEE RIVER	0408	1.30	31.5	F	SS	P	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D	
OWYHEE RIVER	0502	1.00	24.2	G	EX1	G	S	EX1	G	S	EX1	G	S	EX1	G	S	EX1	G	S	EX1	G	S	
OWYHEE RIVER	0506	0.50	12.1	F	SS	P	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D	
OWYHEE (ROME-RSRV)	UNA	41.00	981.0	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	
OWYHEE (3 FKS-ROME)	UNA	35.00	840.0	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	
PAYNE CREEK	1203	2.50	7.5	F	RR3	P	D	RR3	P	D	RR2	F	S	RR2	F	S	RR3	P	D	RR3	P	D	
POLE CREEK	1307	4.75	1.1	G	DR1	G	S	DR1	G	S	SS	G	S	EX1	E	U	EX1	E	U	EX1	E	U	
RATTLESNAKE CR	1305	6.50	2.2	G	DR1	G	S	DR1	G	S	DR1	G	S	DR1	G	S	DR1	G	S	DR1	G	S	
RATTLESNAKE CR	1305			G	DR1	F	D	DR1	F	D	DR3	G	U	DR3	G	U	DR3	G	U	DR3	G	U	
RATTLESNAKE CR	1305			F	DR1	F	S	DR1	F	S	DR3	G	U	DR3	G	U	DR3	G	U	DR3	G	U	
SF SQUAW CREEK	0300	3.50	10.6	F	EA	F	S	DR1	F	S	EA	G	U	EX1	G	U	EX1	G	U	EX1	G	U	
SF SQUAW CREEK	0300			F	RR4	F	S	DR1	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	
SHEEP CR	0400	1.50	4.5	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	
SIMMONS GULCH CR	0300	2.00	6.0	?	RR4	?	?	DR1	?	?	DR2	?	?	DR2	?	?	DR2	?	?	DR2	?	?	
SNAKE RIVER	UNA	0.30	10.8	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	
SPRING CREEK	0500	3.00	9.1	?	FFR	?	?	FFR	?	?	FFR	?	?	FFR	?	?	FFR	?	?	FFR	?	?	
SQUAW CREEK	0300	4.00	12.1	F	EA	F	S	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S	
SUCCOR CREEK	0500	7.00	21.1	F	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D	
SUCCOR CREEK	0500			F	SS	P	D	DR3	G	U	SS	P	D	SS	P	D	SS	P	D	SS	P	D	
SUCCOR CREEK	0500			F	SS	P	D	EA	P	D	EA	P	D	EX1	P	D	EX1	P	D	EX1	P	D	
SUCCOR CREEK	0500			F	FFR	F	S	FFR	F	S	FFR	F	S	FFR	F	S	FFR	F	S	FFR	F	S	
SUCCOR CREEK	0500			F	SS	P	D	SS	P	D	DR3	G	U	DR3	G	U	DR3	G	U	DR3	G	U	
TWELVE MILE CR	1201	0.25	0.1	P	SF	P	D	SF	P	D	SF	P	D	SF	P	D	SF	P	D	SF	P	D	
TWIN SPRINGS CR	0400	1.50	4.5	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	DR4	?	?	
WHITEHORSE CREEK	1201	11.00	60.0	G	EX	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
WHITEHORSE CREEK	1201			F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	0500	4.00	12.1	?	EA	?	?	EA	?	?	SS	?	?	SS	?	?	SS	?	?	SS	?	?	
WILLOW CR	1204	13.25	30.4	G	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	1204			G	RR2	G	U	RR2	G	U	DR2	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	1204			G	RR2	G	S	RR2	G	S	DR2	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	1204			F	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	1204			F	RR2	F	U	RR2	F	U	DR2	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	1204			F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR	1204			P	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U	
WILLOW CR	1204			P	RR2	P	S	RR2	P	S	DR2	F	U	EX1	G	U	EX1	G	U	EX1	G	U	
WILLOW CR (TRIB)	1204	2.00	8.8	F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	E	U	EX1	E	U	EX1	E	U	
WILLOW CR (TRIB)	1204			P	RR2	P	D	RR2	P	D	DR2	F	U	EX1	G	U	EX1	G	U	EX1	G	U	

Key:

Grazing System	Yearly Sequence of Use
W	Winter use every year
SS	Use during critical growth period every year
UNA	Inaccessible or Unallotted
EX1	Exclusion
EA	Early Spring Every Year

Grazing System	Yearly Sequence of Use
SF	EA/DF every year
DF	Use after seed ripe every year
DR1	1 year SS/1 year DF
DR2	1 year EA/1 year DF
DR3	1 year SS/1 year winter
DR4	1 year EA or SS/2 year DF
RR2	1 year SS/1 year rest
RR3	2 or 3 years SS/1 year rest
RR4	1 or 2 years early spring/1 year

Condition	Trend
E - Excellent	U - Up
G - Good	D - Down
F - Fair	S - Static
P - Poor	? - Unknown

<sup>1</sup> Located in Whitehorse Basin

<sup>2</sup> Tributary to Little Owyhee River

<sup>3</sup> Tributary to Indian Creek

<sup>4</sup> Tributary to Malheur River



# Appendix G, Table G-3 Predicted Long-Term Condition and Trend in Fish Habitat

Fishery Streams	Allot	Miles	Alt. 1 No Action			Alt. 2 Emphasize Livestock			Alt. 3 Preferred Alternative			Alt. 4 Emphasize Non Livestock			Alt. 5 Emphasize Wild Horses			
			Exist. Cond.	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend
Antelope Cr <sup>1</sup>	1201	2.00	G	DF	G	S	DF	G	S	DR2	G	S	EX1	G	S	EX1	G	S
Antelope Creek <sup>2</sup>	1306	7.00	F	RR4	F	S	RR4	F	S	RR4	F	S	RR4	F	S	RR4	F	S
Carter Creek	0500	2.75	E	DR1	E	S	RR4	E	S	EA	E	S	RR4	E	S	RR4	E	S
Carter Creek	0500		G	DR1	G	S	RR4	G	S	RR4	G	S	RR4	G	S	RR4	G	S
Carter Creek	0500		F	DR1	F	S	RR4	F	S	RR4	F	S	RR4	F	S	RR4	F	S
Carter Creek	0500		P	SS	P	D	EA	F	U	RR4	F	U	EA	F	U	EA	F	U
Cottonwood Cr (Ind) <sup>3</sup>	1202	1.75	G	EA	E	U	EA	E	U	EA	E	U	EX1	E	U	EX1	E	U
Cottonwood Cr (Ind) <sup>3</sup>	1202		F	EA	G	U	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U
Cottonwood Creek <sup>4</sup>	0300	10.50	F	DR1	F	S	DR1	P	D	DR2	F	S	DR2	F	S	DR2	F	S
Cottonwood Creek <sup>4</sup>	0300		F	RR2	F	S	DR1	P	D	DR2	F	S	EX1	E	U	EX1	E	U
Cottonwood Creek <sup>4</sup>	0300		P	RR2	P	S	DR1	P	S	DR2	P	S	EX1	P	S	EX1	P	S
Cottonwood Creek <sup>4</sup>	0300		P	RR2	P	S	DR1	P	D	DR2	P	S	EX1	G	U	EX1	G	U
Crooked Creek	0801	3.00	G	EA	G	S	EA	G	S	EA	G	S	EA	G	S	EA	G	S
Crooked Creek	0801		G	SS	G	S	SS	G	S	EA	G	S	SS	G	S	SS	G	S
Crooked Creek	0801		P	EA	P	S	EA	P	S	EA	P	S	EA	P	S	EA	P	S
Doolittle Creek	1201	6.00	G	EA	F	D	DF	F	D	DR2	G	S	EX1	G	S	EX1	G	S
Doolittle Creek	1201		F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U
Dry Creek	0400	2.50	F	DR4	F	S	DR2	F	S	DR2	F	S	EX1	G	U	EX1	G	U
Dry Creek	0400		F	DR4	F	S	DR2	F	S	DR2	F	S	EX1	F	S	EX1	F	S
Dry Creek	0400		F	DR4	P	S	DR2	F	D	DR2	F	D	EX1	E	U	EX1	E	U
Fifteen Mile Creek	1201	3.00	G	DF	F	D	DF	F	D	DR2	G	S	EX1	G	S	EX1	G	S
Indian Creek	1202	7.25	G	EA	G	S	EA	G	S	EA	G	S	EX1	G	S	EX1	G	S
Indian Creek	1202		F	EA	G	U	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U
Indian Creek	1202		F	EA	F	S	EA	F	S	EA	F	S	EX1	G	U	EX1	G	U
Indian Creek	1202		P	EA	F	U	EA	F	U	EA	F	U	EX1	G	U	EX1	G	U
Indian Creek	1202		P	EA	P	S	EA	P	S	EA	P	S	EX1	F	U	EX1	F	U
Jordan Creek	UNA	2.00	P	UNA	P	S	UNA	P	S	UNA	P	S	UNA	P	S	UNA	P	S
L Whitehorse Cr	1204	8.65	G	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U
L Whitehorse Cr	1204		G	RR2	G	S	RR2	G	S	DR2	G	S	EX1	G	S	EX1	G	S
L Whitehorse Cr	1204		F	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U
L Whitehorse Cr	1204		F	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U
L Whitehorse Cr	1204		F	RR2	F	U	RR2	F	U	DR2	G	U	EX1	E	U	EX1	E	U
L Whitehorse Cr	1204		F	RR2	F	S	RR2	F	S	DR2	F	S	EX1	F	S	EX1	F	S
L Whitehorse Cr	1204		P	RR2	P	D	RR2	P	D	DR2	F	U	EX1	G	U	EX1	G	U
L Whitehorse Cr	1204		P	RR2	P	D	RR2	P	D	DR2	F	U	EX1	F	U	EX1	F	U
Line Canyon Cr	1203	2.00	F	RR3	P	D	RR3	P	D	DR2	G	U	EX1	E	U	EX1	E	U
Line Canyon Cr	1203		F	RR3	P	D	RR3	P	D	DR2	G	U	EX1	G	U	EX1	G	U
Little Owyhee River	1307	28.75	G	DR1	F	D	DR1	F	D	RR4	E	U	EX1	E	U	EX1	E	U
Little Owyhee River	1307		F	DR1	F	S	DR1	F	S	RR4	F	S	EX1	F	S	EX1	F	S
Little Owyhee River	1307		F	DR1	P	D	DR1	P	D	RR4	G	U	EX1	F	S	EX1	E	U
Little Owyhee River	1307		F	DR1	F	S	DR1	F	S	RR4	F	S	DR1	F	S	DR1	F	S
Little Owyhee River	1307		F	EX1	F	S	EX1	F	S	EX1	F	S	EX1	F	S	EX1	F	S
Little Owyhee River	1307		P	DR1	P	S	DR1	P	S	RR4	P	S	EX1	P	S	EX1	P	S
Little Owyhee River	1307		P	DR1	P	D	DR1	P	D	RR4	F	U	EX1	G	U	EX1	G	U
Malheur River	UNA	2.50	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S
Malheur River	0300	0.30	G	RR2	G	S	DR1	F	S	DR2	G	S	DR2	G	S	EX1	G	S
Malheur River	0304	5.40	G	DF	F	S	DF	F	S	FFR	G	S	DR2	G	S	DR2	G	S
Malheur River	0304		G	DR1	F	D	DR1	F	D	DR1	G	S	DR1	G	S	EX1	E	U
Malheur River	0304		G	EA	G	S	DR1	F	D	DR2	G	S	DR2	G	S	DR2	G	S
Malheur River	0304		G	RR2	G	S	DR1	F	D	DR2	G	S	DR2	G	S	DR2	G	S
Malheur River	0410	1.20	G	FFR	G	S	FFR	G	S	FFR	G	S	FFR	G	S	FFR	G	S
McDermitt Cr	1202	3.00	F	EA	G	U	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U
McDermitt Cr	1203	8.50	G	RR3	F	D	RR3	F	D	DR2	E	U	EX1	E	U	EX1	E	U
McDermitt Cr	1203		F	RR3	P	D	RR3	P	D	DR2	G	U	EX1	E	U	EX1	E	U
McDermitt Cr	1203		F	RR3	P	D	RR3	P	D	DR2	G	U	EX1	G	U	EX1	G	U
McDermitt Cr	1203		F	RR3	P	D	RR3	P	D	DR2	F	S	EX1	F	S	EX1	F	S
NF Squaw Creek	0300	3.25	G	RR4	G	S	DR1	G	S	DR2	G	S	DR2	G	S	DR2	G	S
NF Squaw Creek	0300		F	RR4	F	S	DR1	F	S	DR2	F	S	DR2	F	S	DR2	F	S
NF Squaw Creek	0300		P	RR4	P	S	DR1	P	S	DR2	P	S	DR2	P	S	DR2	P	S
Oregon Can Cr	1201	10.75	G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U
Oregon Can Cr	1201			DF	F	D	DF	F	D	DR2	G	S	EX1	G	S	EX1	G	S
Oregon Can Cr	1201		F	DF	P	D	DF	P	D	DR2	F	U	EX1	E	U	EX1	E	U
Oregon Can Cr	1201		P	DF	P	D	DF	P	D	DR2	F	U	EX1	G	U	EX1	G	U
Oregon Canyon Cr	1201	0.75	G	DF	F	D	DF	F	D	DR2	E	U	EX1	E	U	EX1	E	U
Owyhee River	UNA	0.20	G	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S	UNA	G	S
Owyhee River	0303	1.50	F	RR2	P	D	DR1	P	D	DR2	F	S	DR1	P	D	DR1	P	D
Owyhee River	0400	5.80	G	DR1	F	D	DR1	F	D	EX1	G	S	EX1	G	S	EX1	G	S
Owyhee River	0400		F	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S	DR2	F	S
Owyhee River	0408	1.30	G	EA	F	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D
Owyhee River	0502	1.00	G	EX1	G	S	EX1	G	S	EX1	G	S	EX1	G	S	EX1	G	S
Owyhee River	0506	0.50	F	SS	P	D	SS	P	D	SS	P	D	SS	P	D	SS	P	D
Owyhee (Rome-RSRV)	UNA	41.00	F	UNA	F	S	UNA	F	S	UNA	F	S	UNA	F	S	UNA	F	S
Owyhee (3 Fks-Rome)	UNA	35.00	F	UNA	F	S	UNA	F	S	UNA	F	S	UNA	F	S	UNA	F	S
Pole Creek	1307	4.75	P	DR1	P	S	DR1	P	S	SS	P	S	EX1	P	S	EX1	P	S
Rattlesnake Cr	1305	3.25	F	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S	DR1	F	S
Rattlesnake Cr	1305		F	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D	DR1	P	D
SF Squaw Creek	0300	2.50	F	RR4	F	S	DR1	F	S	DR2	F	S	DR2	F	S	DR2	F	S
Snake River	UNA	0.30	F	NA	F	S	NA	F	S	UNA	F	S	UNA	F	S	UNA	F	S



			Alt. 1 No Action				Alt. 2 Emphasize Livestock				Alt. 3 Preferred Alternative				Alt. 4 Emphasize Non Livestock				Alt. 5 Emphasize Wild Horses			
Fishery Streams	Allot	Miles	Exist. Cond.	Grazing System	Grazing		Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend	Grazing System	Cond.	Trend				
					Cond.	Trend																
Succor Creek	0500	7.00	F	DR1	P	D	DR1	P	D	DR3	G	U	DR3	G	U	DR3	G	U				
Succor Creek	0500			SS	P	D	DR3	G	U	DR3	G	U	DR3	G	U	DR3	G	U				
Succor Creek	0500			SS	P	D	EA	G	U	EA	G	U	EX1	E	U	EX1	E	U				
Succor Creek	0500			FFR	F	U	FFR	F	U	FFR	F	U	FFR	F	U	FFR	F	U				
Succor Creek	0500			SS	P	D	SS	P	D	DR3	G	U	DR3	G	U	DR3	G	U				
Whitehorse Creek	1201	11.00	F	DF	P	D	DF	P	D	DR2	G	U	EX1	E	U	EX1	E	U				
Whitehorse Creek	1201			EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
Willow Cr	1204	13.25	G	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
Willow Cr	1204		F	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U	EX1	E	U				
Willow Cr	1204		F	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U				
Willow Cr	1204		F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	E	U	EX1	E	U				
Willow Cr	1204		F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	G	U	EX1	G	U				
Willow Cr	1204		P	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U	EX1	G	U				
Willow Cr	1204		P	RR2	P	D	RR2	P	D	DR2	F	U	EX1	G	U	EX1	G	U				
Willow Cr (Trib)	1204	2.00	F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	E	U	EX1	E	U				
Willow Cr (Trib)	1204		F	RR2	F	S	RR2	F	S	DR2	G	U	EX1	G	U	EX1	G	U				

Key:

Grazing System	Yearly Sequence of Use
W	Winter use every year
SS	Use during critical growth period every year
UNA	Inaccessible or Unallotted
EX1	Exclusion
EA	Early Spring Every Year

Grazing System	Yearly Sequence of Use
SF	EA/DF every year
DF	Use after seed ripe every year
DR1	1 year SS/1 year DF
DR2	1 year EA/1 year DF
DR3	1 year SS/1 year winter
DR4	1 year EA or SS/2 year DF
RR2	1 year SS/1 year rest
RR3	2 or 3 years SS/1 year rest
RR4	1 or 2 years early spring/1 year rest

Condition	Trend
E - Excellent	U - Up
G - Good	D - Down
F - Fair	S - Static
P - Poor	? - Unknown

- <sup>1</sup> Located in Whitehorse Basin  
<sup>2</sup> Tributary to Little Owyhee River  
<sup>3</sup> Tributary to Indian Creek  
<sup>4</sup> Tributary to Malheur River











BLM LIBRARY  
RS 150A BLDG. 50  
DENVER FEDERAL CENTER  
P.O. BOX 25047  
DENVER, CO 80225



R'S CARD

U551  
of Land  
neur grazing  
program

OFFICE	DATE RETURNED

(Continued on reverse)

SF 85.35 .07 U551  
U. S. Bureau of Land  
Management.  
Southern Malheur grazing  
management program

BLM LIBRARY  
RS 150A BLDG. 50  
DENVER FEDERAL CENTER  
P.O. BOX 25047  
DENVER, CO 80225



**U.S. Department of the Interior**

Bureau of Land Management

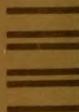
Vale District Office

P.O. Box 700

Vale, OR 97918

**OFFICIAL BUSINESS**

PENALTY FOR PRIVATE USE, \$300



FIRST-CLASS MAIL  
POSTAGE & FEES PAID  
U.S. DEPARTMENT OF THE INTERIOR  
PERMIT NO. G-76